CATALOGUE

OF THE

COLEOPTEROUS INSECTS

OF

MADEIRA.

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OF THE

COLEOPTEROUS INSECTS

OF

MADEIRA

IN

THE COLLECTION

OF THE

BRITISH MUSEUM.

BY

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PREFACE.

This Catalogue contains an enumeration of the specimens of Coleopterous Insects collected in Madeira by Mr. Wollaston, as described in his *Insecta Maderensia*, and of the species which he has obtained since the publication of that volume,—some of which were procured in the Island by Messrs. Bewicke, Mason and Ross, and have by these gentlemen been presented to the Museum Collection.

In the "Introductory Remarks" Mr. Wollaston has given an account of the collections, and of the object of the Catalogue.

JOHN EDWARD GRAY.

Aug. 15, 1857.

INTRODUCTORY REMARKS.

ALTHOUGH strictly an enumeration of the Madeiran Coleoptera contained in the British Museum, the present Catalogue has the advantage of being also a *general* one; for, through the liberality of the only three gentlemen (Messrs. Bewicke, Mason, and Ross) who happened to possess what I could not myself place there, I am glad to have it in my power to state, that *every species which has been hitherto detected in those islands* is now represented in the National Collection.

Exactly 100* species (63 of which I have regarded as new to science) have been brought to light, in the Madeiras, since the publication of the *Insecta Maderensia*, in 1854; three moreover (*Trechus lævis*, *Ellipsodes oblongior*, and *Stenus fulvescens*) have been added, which I had looked upon, up to that date, as mere modifications of others; whilst five forms, which, from insufficient evidence, I had described as species (viz. *Tarphius spinipes*, *Ptinus longicornis*, *Atlantis lauripotens* and *austrinus*, and *Stagonomorpha unicolor*), have been treated as varieties: so that the *total number* is now augmented (from 482) to 580.

As would of course be anticipated, these 580 species are composed of insects which are partly indigenous and partly introduced; and it is only by a careful observation of them *in situ*, and a close inquiry into their various habits, that it can be decided to which of these two classes the several creatures belong. In some instances indeed

* Of these 100 additions, I may observe that 14 (viz. *Dromius alutaceus* and *plagiatus*, *Rhyzophagus bipustulatus*, *Silvanus unidentatus*, *Cryptophagus saginatus*, *Tomicus erosus*, *Acalles festivus*, *Blabinotus Bewickii*, *Longitarsus fractus* and *excurvus*, *Rhyzobius oculatissimus*, *Homalota montivagans*, *Philonthus punctipennis*, and *Lithocharis debilicornis*) were discovered by Mr. Bewicke; five (viz. *Cercyon litorale*, *Pogonocherus hispidus*, *Hypophlœus ambiguus*, *Helops subdepressus*, and *Homalota alutaria*) by Mr. Mason; two (viz. *Olisthopus acutangulus* and *Bembidium dubium*) by Mr. M. Park; one (*Cassida Rossii*) by Mr. J. J. Ross; one (*Formicomus pedestris*) by Mr. E. Leacock; one (*Tomicus perforans*) by Mrs. Phelps; and the remaining 76 by myself.

it is not possible to solve this question with any degree of certainty; nevertheless in a vast number of cases it is by no means difficult to do so; and I am satisfied that local data, if attentively considered, will usually enable us to distinguish pretty clearly, at any rate, the *ultra*-indigenous ones (if we may thus express them) from those which have been naturalized. Accordingly, in the following Catalogue, I have indicated by a double asterisk (**) those species which have been *undoubtedly imported*; some of these are indeed well nigh cosmopolitan, and are (in Madeira, as elsewhere) liable to be introduced afresh, by direct human agencies, almost every year. To those which there is strong reason to believe have *found their way to the islands*, through various accidental circumstances, during the last few centuries (*i. e.* since the Group was first colonized), I have affixed a single asterisk (*); whilst those which are left unmarked are, in my opinion, indigenous.

There is still, however, another distinction to be drawn, before we can properly attempt to generalize. It is manifest that these *indigenous* members of the fauna are made up, in reality, of two kinds; for, though they are *all* of them "indigenous" in the common acceptation of that term, it is evident (if there be any truth in the doctrine of specific centres of creation) that some must have found their way to where they now are, at a very remote epoch, *through natural causes* (perhaps by migration over a land of passage which has been since destroyed), operating regularly and during an immense interval of time; whilst others are absolutely *endemic*, occurring apparently in no other country of the world, and being therefore (if we may repeat our former expression) "*ultra*-indigenous,"—the very *αὐτόχθονες* of the soil, called originally into being to satisfy the special requirements of the spot, and adapted therefore to the particular physical conditions which they were destined, through after-ages, to be subservient to. Now it is not always easy to draw the line of separation between the creatures which fall under these two opposite heads; and therefore in the body of this volume I have not ventured to do so, but have simply contented myself by regarding them all as indigenous. Still, since a *large number* of the unasterisked ones are *eminently characteristic* (as it were) of these islands—being not only of slow migratory powers, and singularly adjusted to the nature of their several "habitats," but presenting likewise (in a more or less evident combination) certain *geographical peculiarities* which tend to affiliate them with what I would emphatically call the *Madeiran types*; I have thought it desirable, in the list appended to these introductory remarks, to indicate such species by putting them in *italics*.

We have therefore four sets of beings to take into account:

1st, those which are *manifestly introduced*, being (from their modes of subsistence) constantly liable to importation into the islands *by direct human agencies*;

2ndly, those which have been *probably naturalized*, through various accidental circumstances, since the commencement of the period at which the Madeiras were first colonized;

3rdly, those which are indigenous, but which have probably migrated thither, at a remote epoch, *through regular and natural processes*,—whether over a land of passage, or transported from more northern latitudes (during other conditions of climate) on floating masses of ice; and

4thly, those which were *created* in that region, and which still remain endemic,—not having been able, even to this day (the result partly, perhaps, of their after-isolation), to extend themselves far beyond the primeval areas of their birth.

Bearing in mind therefore the special characters of these four Coleopterous assortments, we will make a few practical remarks on our general statistics,—making use, however, of the above (somewhat finely-drawn) distinctions only in those cases in which the application of them would seem sufficiently simple and apparent to warrant anything like satisfactory conclusions being deduced from them.

Let us first observe, then, that out of the 580 species which have been detected in the Madeiran Group, 45, at any rate (if not a greater number), are *manifestly of recent importation*; that at least 75 have probably found their way thither, through various accidental causes, since the islands were first colonized; and that the remaining 460 are apparently indigenous,—only 266 of which, however, come under the class which we have defined as "*ultra*-indigenous*" (the other 194 having possibly migrated from neighbouring regions, by regular and natural processes, at some remote epoch when facilities were offered which do not now exist for letting-in the members of adjoining tracts over this ancient Atlantic province).

But, before we proceed, we may just pause to notice a small collateral result which the above statement will enable us to arrive at.

* I have preferred this term (however barbarous) to "endemic," because it conveys a more correct notion of the creatures to which it is applied. Had I used the latter word, I could scarcely (with only the *probability* to justify me, of certain of the species occurring elsewhere also) have consistently withheld it from *any* of the Coleoptera *which have hitherto been observed exclusively at the Madeiras*,—the result in many instances, as I cannot but believe, of the merest accident. I would repeat therefore, that the insects thus designated have a better reason for being regarded as *par excellence* indigenous, than that which the fact (important as it necessarily is) *of their not having been as yet discovered elsewhere* does, of itself, afford.

The 45 *unquestionably introduced* species just alluded to are distributed under the following divisions (thus numerically arranged): *Necrophaga* 15, *Priocerata* 9, *Rhyncophora* 7, *Eucerata* and *Heteromera* 5, *Cordylocerata* 2, *Hydradephaga* and *Phytophaga* 1, *Brachelytra*, *Pseudotrimera*, *Philhydrida*, and *Geodephaga* 0. And the 75 *probably introduced* ones stand thus: *Necrophaga* 20, *Brachelytra* 14, *Cordylocerata* and *Rhyncophora* 10, *Phytophaga* 5, *Philhydrida* and *Pseudotrimera* 4, *Hydradephaga* and *Heteromera* 3, *Eucerata* and *Priocerata* 1, *Geodephaga* 0. Now it is very possible that I may have been mistaken in my exact separation of these two *sets*, and that they should, more safely, be regarded as one; nevertheless, be this as it may, we perceive that the *Geodephaga* does not in *either* instance make a single contribution towards the list of naturalized forms; whilst, on the other hand, the *Necrophaga*, in *both* cases, far exceeds every other Section. So that it would appear (if my premises be sound) that the members of the latter group are more liable than those of any other to become diffused, by human and other artificial agencies, throughout the civilized world; and that those of the former are the least so of all. And this, I conceive, is in perfect accordance with the habits of the creatures.

If the consideration, however, of those species which are *certainly* and probably naturalized (contained in the *first two* of the assemblages above defined) lead us to the *general* conclusion just arrived at; we may notice, on the other hand, an interesting *local peculiarity* whilst contemplating the members of the *last* two Sections,—viz. those which are (whether absolutely endemic or otherwise), in the common sense of the word, *indigenous**. Now, placing the two following lists alongside each other, thus:

Ultra-indigenous.		*Indigenous.*	
1. *Rhyncophora*	73	1. *Brachelytra*	51
2. *Necrophaga*	40	2. *Geodephaga*	35
3. *Brachelytra*	37	3. *Necrophaga*	24
4. *Geodephaga*	36	4. *Rhyncophora*	21
5. *Heteromera*	26	5. *Heteromera*	15
6. *Priocerata*	19	6. *Pseudotrimera*	12
7. *Phytophaga*	10	7. *Priocerata*	11
8. *Pseudotrimera*	7	8. *Phytophaga*	9
9. *Philhydrida*	6	9. *Cordylocerata*	8
10. *Cordylocerata*	5	10. *Philhydrida*	7
11. *Eucerata*	4	11. *Hydradephaga*	1
12. *Hydradephaga*	3	12. *Eucerata*	0
	266		194

* I may state that this distribution of the species under *two heads only* (how-

the first thing that strikes us is the strange preponderance of the *Rhyncophora* amongst the *ultra*-indigenous forms, and the deficiency of the *Eucerata* and *Hydradephaga* in *both* sets. The relative proportions of the other Sections, in the two Catalogues, must speak for themselves, as we have not space to comment upon them. We may however just remark, that the *Geodephaga*, which was absolutely unrepresented in the enumeration of *introduced species*, has [not merely a fair proportion of *endemic* exponents in the Madeiras, but] a considerable number of members which would appear (if my premises be correct) to have found their way thither, from Mediterranean latitudes, at the remote epoch when this Atlantic province was gradually overspread by the insect-inhabitants of the adjoining regions. And we arrive therefore at this significant fact, that, although the *Geodephaga* possess ample powers of self-diffusion *through natural causes*, they are very difficult of dissemination *by artificial ones*.

But let us revert to the general statistics. As already stated, the *entire number* of species (indigenous and naturalized) which have been as yet detected in the Madeiras is 580. Arranging the Sections which contain them, according as each is numerically represented, they stand thus:—

1.	*Rhyncophora*	111
2.	*Brachelytra*	102
3.	*Necrophaga*	99
4.	*Geodephaga*	71
5.	*Heteromera*	49
6.	*Priocerata*	40
7.	*Cordylocerata*	25
8.	*Phytophaga*	25
9.	*Pseudotrimera*	23
10.	*Philhydrida*	17
11.	*Eucerata*	10
12.	*Hydradephaga*	8
		580

If now we add together the "indigenous" and "ultra-indigenous" lists, given above, we shall have the following proportions for the

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ever rough they be, and approximately correct) is more likely perhaps to lead to sound conclusions respecting the statistics than if we were to base our calculations upon a too rigid admission of the *fourfold* nature of our Coleoptera. I shall therefore, as the safer plan, regard the fauna, generally, in its twofold light.

species which, in the usual acceptation of the term, would be called *indigenous*:

1.	*Rhyncophora*	94
2.	*Brachelytra*	88
3.	*Geodephaga*	71
4.	*Necrophaga*	64
5.	*Heteromera*	41
6.	*Priocerata*	30
7.	*Pseudotrimera*	19
8.	*Phytophaga*	19
9.	*Cordylocerata*	13
10.	*Philhydrida*	13
11.	*Eucerata*	4
12.	*Hydradephaga*	4
		460

Here then we have two Catalogues to judge from; and it is remarkable how nearly they correspond, both in their arrangement and numerical proportions: hence, whether we regard the *entire* one, or that which is confined to the more evidently indigenous species, it matters not,—for the *general conclusions* will be the same.

That the Water-beetles and Longicorns should be so feebly represented, in an island almost clothed with forests and abounding in streams, is not a little remarkable; yet such is the case, for there are apparently but three of each in Madeira proper which can be regarded as absolutely indigenous. In Porto Santo indeed, and on the Dezertas*, there would seem to be but two water-beetles; whilst in

* It is an important fact for those naturalists who are studying the questions of insect-migration, that there should be even a single water-beetle on the Dezertas,—for *there are no streams there*. On the southern island there is not any water at all, so that none of these creatures can of course be found upon *it*; but on the two northern ones, a few small pools to receive the drainings of the surrounding soil, after rain, have been (I believe *within a comparatively recent period*) artificially formed: nevertheless in these basins (the contents of which, I imagine, must well nigh evaporate during every hot season) the *Agabus nebulosus* and *Hydroporus confluens* (both common European species) absolutely teem. It is generally supposed that the *Hydradephaga* are more difficult of transport than the members of most other families; but this is more apparent than real, for it must be remembered that they are very active and powerful in flight, and that many of them are not killed by a considerable immersion in the sea. "Although perhaps at first sight," says Mr. A. Murray (in the *Edinburgh New Phil. Journal*, vol. ii. p. 170), "a water-beetle may not seem a very probable insect to be introduced by man, still, in point of fact, there are few classes of insects more likely to have their range extended in this way. A ship fills its water-casks at a stream, or well, in one country; if they are not exhausted by the time it reaches its destination, in another, the old water is started out, and the casks re-filled: so that, supposing a few larvæ or eggs of water-insects to get into the barrels when being filled, they may be introduced as colonists into any

the former there is not so much as a single Longicorn, and in the latter only one. Scarcely less curious, also, than this twofold deficiency, is the immense preponderance of the weevils,—of which the greater portion moreover are absolutely *endemic*. Being creatures, however, by nature, of rather sedentary habits, as compared with the Coleoptera generally, there are but few countries in the world which have not some species essentially their own: nevertheless since it is the tendency of the Madeiran ones to be not only unusually sluggish, but *apterous*, we shall not be surprised to find them in that region even *more* local than in many others; and accordingly there is scarcely a single rock of the entire Group which has not some special Curculio to boast of. Thus, for instance, to take Madeira and Porto Santo, there are 76 apparently indigenous weevils in the former, and 27 in the latter; yet I have hitherto been able to detect only 13 of these as common to the two islands. The Dezerta Grande also has 3 very indigenous members of the *Rhyncophora* peculiar to it; and even the diminutive Ilheo Chão has one. If the weevils however thus predominate throughout the cluster, other families and groups (which we are accustomed to look upon as almost cosmopolitan) are literally unknown. Thus, the *Cicindelidæ* have no exponent; nor have the great genera *Carabus*, *Silpha*, *Necrophorus*, *Telephorus*, *Tentyria*, *Pimelia*, *Akis*, *Asida*, *Otiorhynchus*, &c. The *Buprestidæ* and *Pselaphidæ*, which I had regarded in the *Insecta Maderensia* as absent, have been brought to light by the detection of a single species in each,—though both of them of such extreme rarity that the families are, after all, but just expressed. And so with the *Elateridæ*, and the enormous and important department of the Thalerophagous Lamellicorns,—the little Porto-Santan *Coptostethus* being still the sole representative of the former (of which *no member*, therefore, *has been discovered in Madeira proper*!); and Dr. Heineken's unique example of *Chasmatopterus* (which may perhaps have been imported into the island*) remaining, as before, our only voucher for the existence of the latter.

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quarter of the globe." I have thought it desirable to dwell upon this point, because one of the species admitted into our fauna (on the authority of a unique specimen from the collection of the late Dr. Heineken), and which I have marked as *unquestionably* (in my opinion) *imported*, is the common European *Gyrinus natator*.

* It is singular that there are still no less than 12 species, from the small collection formed by the late Dr. Heineken near Funchal, which have not hitherto occurred to any other naturalist. And this is the more remarkable, when we consider how inefficiently he was able to search, and how great have been our combined labours, at intervals, during the last ten years. Not to mention the long period over which the Rev. R. T. Lowe's investigations had previously extended, nor to advert to my own four sojourns in the island, of some eight

Such are a few of the *general peculiarities* which are at once apparent, on glancing over our Catalogue. It may be interesting to state (which however will be gathered from the subjoined list) that the entire number of species which have been as yet detected in Madeira proper is 515, in Porto Santo 162, on the Dezerta Grande 79, on the Bugio 32, and on the Ilheo Chão 22. Or, regarding the three Dezertas as one, which we should manifestly do in all our *generalizations* on the subject (for, whatever may be the amount of evidence either in favour of or against the existence of an ancient Atlantic region causing *all* the present islands to be parts of a continuous land, there can be no question whatsoever that *the Dezertas* at any rate were connected *inter se*), we have: for Madeira 515, for the Dezertas, 89, and for Porto Santo 162.

Of these 515 Madeiran species, 377 have not yet been observed on any of the other detachments of the Group; of the 162 Porto-Santan ones, 41 are apparently confined (so far as the Madeiras are concerned) to that island; and of the 89 which I have observed on the Dezertas, 11 do not (it would seem) exist elsewhere.

Regarding Madeira proper as the central mass (which it is), it will be interesting to gather, that of the 89 species which have been found on the Dezertas, 68 have been discovered also in Madeira, and 51 in Porto Santo; a circumstance which would clearly indicate (considering how much further those rocks are from the latter than from the former, and how *immensely more extensive* the fauna of the larger island is than of the smaller one), that the Dezertas have a closer

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months each; I may add, that neither the careful observations of Mr. Bewicke (who has been so eminently successful in his additions to the fauna), nor the immense material, of at least 20,000 specimens, which has been lately placed in my hands by Mr. Mason; nor yet the continued operations of the various other workers who have been (and still are) ransacking the vicinity of Funchal, have succeeded in bringing to light any of these (for the most part) common European forms. May we not reasonably conclude, therefore, that the greater number of them, if not all, were mere accidental importations from other countries; and that they have not even so much as *naturalized* themselves in the Madeiras? For my own part, I think that we may safely do so; and I am further confirmed in this, from the actual information which was lately communicated to me by Mr. Bewicke,—to the effect that two or three species, at any rate, were taken, many years ago, from amongst foreign timber (as he had ascertained from Mr. Temple) in a yard near the Funchal beach, and were given to Dr. Heineken; and that another was captured on the roof of the Cathedral, which is situated immediately behind the Custom-House. The names of these 12 insects are as follows: *Gyrinus natator*, L.; *Trogosita serrata*, Woll.; *Cholovocera Maderæ*, Westw.; *Attagenus megatoma*, F.; *Trox scaber*, L.; *Chasmatopterus nigrocinctus*, Woll.; *Phlœophagus sulcipennis*, Woll.; *Clytus Arietis*, L.; *Crioceris Asparagi*, L.; *Cassida nebulosa*, L.; *Gastrophysa Polygoni*, L.; and *Coccinella* 14-*pustulata*, L.: all of which, if we except *Cholovocera* (which is not, perhaps, likely to be introduced), are species which might easily have been, from various circumstances, accidentally imported.

affinity (in their insect-inhabitants) with Porto Santo than with the central mass.

In like manner, of the 162 species which have been brought to light in Porto Santo, 113 have been found also in Madeira, and 51 on the Dezertas: or (in other words), *scarcely more than twice as many*, of the Porto-Santan Coleoptera, occur in the central island than on the small and barren rocks of the Dezertas; which (when we consider that the ascertained fauna of Madeira proper is *nearly six times larger* than that of the Dezertas) shows a wonderful numerical proportion (as in the last case) in favour of the affinity between the Dezertas and Porto Santo.

Porto Santo and the Dezertas would appear indeed to have very much in common with each other,—far more so than with Madeira proper *as a whole*, though not much more so than they each of them have with the low and barren São Lourenço promontory which stretches out to the eastward of the central mass, and which would seem in a marked manner to contain some of the most characteristic insects of the other two portions of the Group. Thus, for example, the *Tarus suturalis* and *Tychius robustus*, of Porto Santo and the Dezertas, are found apparently, in Madeira proper, only on that narrow neck of land; the *Atlantis Schaumii* is peculiar to the São Lourenço promontory and Porto Santo; whilst the *Helops futilis* and *congregatus* attain their maximum on the Dezertas, and, like many other species, would seem to have found their way (as it were) either into or out of Madeira *viâ* this low, eastern ridge,—abounding upon it, and gradually becoming scarcer as we approach the mountain-mass. And, without attempting to solve a geological problem, upon which Sir Charles Lyell will probably be able in a short time to throw considerable light, or to add any real evidence either in favour of or against the existence of an ancient connective land; it does certainly appear to me, judging simply from Coleopterous data, as if the insect-population had possessed wonderful facilities, at some remote period, of migrating to and fro (as though along a slightly elevated mountain-ridge) between Porto Santo and the Dezertas, and in like manner (along a similar medium, for it is not the *alpine* forms that we can track) between the latter rocks and the eastern extremity of Madeira.

Space will not permit us to enter further into these broad speculations. A few words however, ere we conclude, on one or two minor (though sufficiently interesting) points. I have hitherto succeeded in detecting only 8 species on *every* island of the cluster; they are as follows, and may be regarded as *ultra*-Madeiran: *Scarites abbreviatus, Calathus complanatus, Harpalus vividus, Ptinus albo-*

pictus, Caulotrupis lucifugus, Tychius robustus, Laparocerus morio *, and *Anaspis Proteus*. If however we divide the Group into its three portions, and look upon the Dezertas as one of them, there are no less than 43 species which are universal. These also, therefore, we should of course imagine *à priori* might be pronounced, emphatically, as indigenous: and so they appear to be, on referring to the Catalogue, for it will be perceived that *only six* of them are there marked as having possibly reached the islands since the period when they were first colonized.

Of the *genera*† with which we have here to do, *Homalota* takes the lead (having 20 exponents); but *Tarphius*, which is next in point of extent (numbering 18 representatives, all manifestly aboriginal), is, when geographically considered, perhaps the most important. *Acalles* also (of which there are 16 members), and *Atlantis* (of which there are 12), are entirely made-up of endemic species; and *Helops* has 10 exceedingly indigenous ones (in addition to the *H. pallidus*, which is European). *Trechus* likewise is largely expressed, 10 of its representatives (if not the whole 11) being endemic; and there are 8 *Ptini* of a very characteristic type. Perhaps the most *remarkable* forms, however, are *Elliptosoma, Zargus, Calobius, Cossyphodes, Europs, Leiparthrum, Leipommata, Echinosoma, Xenorchestes, Deucalion, Glœosoma*, and *Stereus*.

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* This insect is registered in the European catalogues as occurring in Portugal, but I suspect that its claims for admission therein are, to say the least, extremely doubtful: on which subject, see my remarks in the *Insecta Maderensia*.

† Four genera only (viz. *Elliptosoma*, *Leipommata*, *Stereus*, and *Autocera*,—the first of which moreover was indicated, as a sub-genus, in the *Insecta Maderensia*) have been established in the present volume.

CATALOGUE

OF

MADEIRAN COLEOPTERA.

Sectio I. GEODEPHAGA.

Fam. 1. CARABIDÆ.

(Subfam. I. BRACHINIDES.)

Genus 1. **TARUS.**

Clairville, *Ent. Helv.* ii. 94 (1806).

1. **Tarus Maderæ.**

Tarus lineatus, *Woll.* [nec Schön. 1806], *Ins. Mad.* 2 (1854).

Inhabits the mountains of Madeira proper, abounding from about 2000 feet above the sea to the extreme summits of the peaks. It is from the strongly-expressed opinion of Dr. Schaum of Berlin that I am induced to regard this *Tarus* as distinct from the *lineatus* of Schönherr, with which I had identified it in my volume on the Coleoptera of these islands; and so, having already given a full *description* of it in that work, I now cite it under the name which I originally proposed for it in 1849. Although very nearly related to the *T. lineatus*, there can be no question that it presents many small features of its own to separate it therefrom; and to several of these I called attention in the *Insecta Maderensia*: but I am now inclined to agree with Dr. Schaum, that they are of too decided a character to admit of our referring them to the action of local influences; at any

rate it appears safer, in the absence of further and more satisfactory evidence, to act upon that hypothesis. Thus, the Madeiran insect is slightly shorter and less flattened than its European ally; its head and prothorax (the latter of which is more transverse, and has its posterior angles less prominent) are darker, and the sculpture of its elytra is altogether different,—their entire surface being minutely and densely *alutaceous* (and therefore less shining), and with the striæ and intermediate punctures much more lightly impressed. The basal *rim* of the elytra, also, is less thickened; and the sutural stria is more bent outwards near the scutellum,—causing the circular indentation in which it terminates to be further removed from the suture.

2. **Tarus suturalis.**

Cymindis suturalis, *Dej., Spec. des Col.* i. 206 (1825).
Tarus suturalis, *Woll., Ins. Mad.* 3 (1854).

Inhabits, in great profusion, the sandy plains and low rocky declivities of Porto Santo; it has also been detected by Mr. Leacock (and subsequently by Mr. Bewicke) on the Ponta São Lourenço of Madeira proper; and I have captured it on the extreme summit of the Dezerta Grande. It occurs, likewise, in the Canary Islands. The specimens from the Madeiran Group have their elytra a little more lightly sculptured than those from Egypt,—of which I possess a series which was collected at Alexandria by Dr. Schaum.

Genus 2. **DROMIUS.**

Bonelli, *Observat. Ent.* i. tab. synopt. (1813).

§ I. *Unguiculi intus serrati.* (Dromii *typici.*)

3. **Dromius insularis.**

Dromius insularis, *Woll., Ins. Mad.* 4 (1854).

Inhabits Madeira and the two northern Dezertas, occurring in the moist sylvan districts of the former, and in grassy places of the latter. Rare.

4. **Dromius alutaceus,** n. sp.

D. lineari-oblongus alutaceus subopacus, capite prothoraceque rufo-piceis, elytris fusco-piceis parallelis depressis, singulo plagâ magnâ elongatâ indeterminatâ pallidâ ornato, antennis pedibusque pallidis.
Long. corp. lin. $2\frac{3}{4}$.

D. linear-oblong, depressed, and sub-opake,—being alutaceous (or

most minutely and densely subgranulated) all over, especially however on the elytra. *Head* and *prothorax* rufo-piceous: the *former* with its eyes more prominent, and its neck less elongated, than in the *D. insularis*, and wanting moreover the longitudinal strigæ on the (less-depressed) forehead: the *latter* subquadrate, less narrowed behind than in that species, and with its margins much more broadly and evidently reflexed. *Elytra* greatly depressed, and with the sides parallel (being much less narrowed anteriorly than in the *D. insularis*); each with a large, pale, elongated, ill-defined dash down its inner disk, and with its outer margin (especially towards the apex) more or less pale also; finely striated, the striæ (which is not the case in the preceding insect) being impunctate; with a distinct series of about seven impressions between the sixth and seventh striæ, but apparently none between the second and third. *Limbs* pale. The *claws* much less evidently toothed than in the *D. insularis*.

A single example of the present *Dromius* was discovered by C. Bewicke, Esq. in Madeira proper (beneath bark in the Circo at S. Antonio de Serra), during March 1856; and he has subsequently captured a series of specimens on the hills above Funchal,—viz. under the outer fibre of yew-trees at the Mount, and of heaths at Camacha. It partakes a little of the characters of the *D. marginellus* and *testaceus* of more northern latitudes; nevertheless, apart from its different colour, it is rather narrower, flatter, and more straightened than either of those species, its prothorax is a little smaller and less margined at the sides, its entire surface is much more *alutaceous* and opake, the longitudinal series of impressions between the sixth and seventh striæ of its elytra are more regular and distinct, and its claws are much smaller and less powerfully toothed. In its comparatively unsculptured forehead, and in the subequal length of the two basal joints of its hinder feet, it approaches the latter of those species more than the former. The specimens in the British Museum were presented by their captor, Mr. Bewicke.

5. Dromius sigma.

Carabus sigma, *Rossi, Fna Etrus.* i. 226 (1790).
Dromius fasciatus, *Sturm, Deutsch. Fna,* vii. 42 (1827).
—— sigma, bipennifer et Sturmii, *Bab., Trans. Ent. Soc. Lond.* i. 85 (1836).
—— ——, *Woll., Ins. Mad.* 5 (1854).

Inhabits Madeira, Porto Santo, and the Dezerta Grande, occurring sparingly beneath stones at a high elevation. In Madeira proper it has been observed by Mr. Mason beneath the outer fibre of heath-trees, under which circumstances he took it on the Pico Ruivo.

6. Dromius arenicola.

Dromius arenicola [script. arenicolus], *Woll., Ins. Mad.* 6 (1854).

Inhabits, in abundance, the sandy plains and low rocky declivities of Porto Santo, in company with the *Tarus suturalis*: and it has lately been discovered by Mr. Bewicke in Madeira proper (which proves it to be a true species, and no mere insular modification),—who captured two specimens on the upland plain of the Fateiras, during December 1856.

7. Dromius obscuroguttatus.

Lebia obscuroguttata (*Anders.*), *Dufts., Fna Austr.* ii. 249 (1812).
Dromius spilotus, *Dej., Spec. des Col.* i. 246 (1825).
—— impunctatus (*Kby*), *Steph., Ill. Brit. Ent.* i. 23 (1828).
—— obscuroguttatus, *Woll., Ins. Mad.* 7 (1854).

Inhabits the mountains of Madeira proper, abounding beneath stones on the open grassy slopes, from about 3000 feet above the sea to the summits of the peaks.

8. Dromius glabratus.

Carabus femoralis, *Mshm, Ent. Brit.* i. 463 (1802).
Lebia glabrata (*Meg.*), *Dufts., Fna Austr.* ii. 248 (1812).
Dromius glabratus, *Sturm, Deutsch. Fna*, vii. 54. tab. 171. f. C (1827).
—— —— et femoralis, *Steph., Ill. Brit. Ent.* i. 25 (1828).
—— —— (p.), *Daws., Geod. Brit.* 13 (1854).
—— negrita, *Woll., Ins. Mad.* 9 (1854).

Inhabits Madeira proper, attaining its maximum at rather low and intermediate elevations. It is the *D. negrita* of the *Insecta Maderensia*,—the *D. glabratus* of that volume being the European *D. maurus*. From a note recently communicated to me by Dr. Schaum of Berlin, it would appear that the two species have been generally confounded (as varieties of each other) under the name of *glabratus*. He had formed his opinion of their distinctness, however (in accordance with the views of Megerle and Sturm), from a careful observation of continental specimens; and it is satisfactory therefore to remark that I had arrived at the same conclusion in Madeira, where they both likewise occur. It was indeed from my knowledge that *a large and a small state* were universally received as mere forms of the *D. glabratus*, that I was induced to describe the larger Madeiran one (which I could not regard as a variety of the smaller) afresh: and so, adopting (in common with most entomologists) the title of *glabratus* for the latter, I called the former *negrita*. It is to the *larger* of the two, however (with the robuster head and antennæ, less

brilliant surface, more quadrate prothorax, longer elytra, and more apparent striæ,) that the name of *glabratus* applies; whilst the *smaller* (in which, moreover, as Dr. Schaum well observes, the tarsal claws are less powerfully denticulated) is the true *maurus*. It will be perceived, by a reference to the synonyms cited above, that the title of *femoralis* has the priority; nevertheless, since Marsham's diagnosis was founded on an immature example of the present species, and is utterly worthless and undecipherable, it can scarcely be allowed to supersede that which was subsequently given,—accompanied by a correct description, and from proper data.

9. **Dromius maurus.**

Dromius maurus (*Meg.*), *Sturm, Deutsch. Fna*, vii. 55. tab. 171. f. D (1827).
—— ——, *Steph., Ill. Brit. Ent.* i. 176 (1828).
—— angustatus et maurus, *Steph., Man.* 8 (1839).
—— glabratus, *Woll., Ins. Mad.* 9 (1854).
—— glabratus (p.), *Daws., Geod. Brit.* 13 (1854).

Inhabits Madeira, Porto Santo, and the Dezerta Grande; rather common.

§ II. *Unguiculi simplices.* (Gen. Lionychus, Schmidt-Gœbel.)

10. **Dromius plagiatus.**

D. subæneo-ater, prothorace subcordato, elytris fere lævibus, singulo plagâ magnâ longitudinali pallidâ ornato, antennarum basi, tibiis tarsisque infuscato-testaceis.
Long. corp. lin. vix $1\frac{1}{2}$.

Lebia plagiata (*Meg.*), *Dufts., Fna Austr.* ii. 249 (1812).
Dromius plagiatus, *Sturm, Deutsch. Fna*, vii. 49. tab. 170. f. D (1827).
—— ——, *Redt., Fna Austr.* 76 (1849).
—— ——, *Leon Fairm., Faun. Ent. Franç.* (*Col.*) 37 (1854).

D. deep black, with a just perceptible testaceous or æneous tinge, shining. *Head* and *prothorax* as in the *D. glabratus*, except that the latter is a little more cordate. *Elytra* most obsoletely striated, the striæ being scarcely perceptible; and ornamented on the disk of each with a large, pale, longitudinal dash. *Antennæ* long, with the first and second joints of a bright rufo-testaceous. *Tibiæ* and *tarsi* of a dull infuscated testaceous: the latter with the *claws* untoothed internally.

Two specimens of the present very distinct little *Dromius* (which may be at once known by the pale longitudinal dash in the middle of each of its elytra, and by its simple claws) were detected by Mr. Bewicke in Porto Santo—one of them in a bone, and the other on the Campo de Baixo—during December of 1856. It is an inhabitant

of Central and Southern Europe, being recorded in Germany and Austria; and it is stated in the *Faune Entomologique Française* to occur beneath the bark of olive-trees in the south of France. I possess an example from Montpelier. The structure of its claws would place it in the genus *Lionychus* of Schmidt-Gœbel; but in all other respects it is so essentially a *Dromius*, that I doubt whether that character can be regarded as of more than Sectional importance. The specimen in the British Museum was presented by Mr. Bewicke.

(Subfam. II. SCARITIDES.)

Genus 3. **SCARITES.**

Fabricius, *Syst. Ent.* 249 (1775).

11. Scarites abbreviatus.

Scarites abbreviatus (*Kollar*), *Dej.*, *Spec. des Col.* i. 379 (1825).
—— —— (——), *Woll.*, *Ins. Mad.* 11 (1854).

Inhabits every† island of the Madeiran Group, ranging from the sea-shore to the summits of the peaks.

12. Scarites humeralis.

Scarites humeralis, *Woll.*, *Ins. Mad.* 12 (1854).

Inhabits Porto Santo, in company with the preceding species,—being apparently, however, more especially abundant on the upper slopes of the Pico do Castello.

Genus 4. **APOTOMUS.**

(Hoffmansegg) Illiger, *Mag. für Ins.* vi. 348 (1807).

13. Apotomus rufus.

Scarites rufus, *Rossi*, *Fna Etrus.* i. 229. pl. 4. f. 3 (1790).
Apotomus rufus, *Hoffmansegg*, *Ill. Mag. für Ins.* vi. 348 (1807).
—— ——, *Dej.*, *Spec. des Col.* i. 450 (1825).
—— ——, *Woll.*, *Ins. Mad.* 14 (1854).

Inhabits Madeira and Porto Santo, during the spring,—occurring

† In the Appendix to the *Insecta Maderensia* I stated, that, not having myself visited the remote rock of the Southern Dezerta, I could not vouch personally for the *S. abbreviatus* being found there,—though I had received specimens purporting to have come from thence. I am now able to state, from actual investigation, that it abounds on the Bugio as much as it does upon the other islands of the Group; and, moreover, that the form which it there assumes does not differ materially from that which obtains on the Dezerta Grande and the Ilheo Chão.

(sparingly) in sunny spots, of a low elevation, near the coast. I have taken it at the Praya Formoza and in Porto Santo, Prof. Heer at the Gorgulho, and Mr. Bewicke at S^{ta} Cruz.

(Subfam. III. CARABIDES.)

Genus 5. **CALOSOMA.**

Weber, *Observat. Entom.* 20 [script. Callisoma] (1801).

14. **Calosoma Maderæ.**

Carabus Maderæ, *Fab., Syst. Ent.* 237 (1775).
—— Indagator, *Fab., Mant. Ins.* i. 197 (1787).
—— hortensis, *Rossi, Fna Etrus.* i. 205. t. 1. f. 3 (1790).
—— auropunctatus, *Rossi* [nec *Payk.*], *Mant.* i. 75 (1792).
—— Maderæ et Calosoma Indagator, *Fab., Syst. Eleu.* i. 175 et 211 (1801).
Calosoma Indagator, *Dej., Spec. des Col.* ii. 205 (1826).
—— Maderæ, *Woll., Ins. Mad.* 15 (1854).

Inhabits all the islands of the Madeiran Group, except (apparently) the Northern Dezerta, on which it has not yet been observed. In Porto Santo (especially on the Ilheo de Baixo, adjoining it), as well as on the Southern Dezerta, it is common during the spring. On the Dezerta Grande it is rare; and in Madeira proper it is principally attached to the sylvan districts of a high elevation. It occurs likewise in the Canary Islands.

Genus 6. **LEISTUS.**

Fröhlich, *Naturf.* xxviii. 9 (1794).

The genus *Leistus* (the discovery of which in these islands is of subsequent date to the publication of the *Insecta Maderensia*) may be at once known by the extremely slender and elongated palpi of the insects which compose it, and by the curious structure both of their upper and lower jaws,—the former of which are unusually dilated towards their outer base, whilst the latter are armed with a series of large spiniform processes (mounted with strong setæ) externally. The mentum has a broad and subemarginated tooth in the centre of its (shallow) excavation; and the ligula is narrow and immensely produced, being also acutely tricuspid at its apex. Like so many, however, of the endemic (Madeiran) representatives of European genera, the *L. ellipticus* differs slightly, even in some of its structural details, from the normal members of the group. Thus, its upper lip is more rounded in front than is the case in its more northern allies, and its paraglossæ are obsolete,—or, at least, are not

anywhere perceptible (so far as I can distinguish) between the base of the ligula and its tricuspid apex. Its wings, likewise, are evanescent.

15. **Leistus ellipticus**, n. sp.

L. fusco-ferrugineus, prothorace amplo lato ad latera subequaliter rotundato necnon late marginato, elytris convexis ellipticis crenato-striatis, ad apicem pallidioribus, antennis, palpis pedibusque longissimis pallidis.
Long. corp. lin. $3\frac{1}{2}$–4.

L. brownish-ferruginous, and but slightly shining. *Head* less constricted behind, and the *eyes* less prominent, than in any of the European *Leisti*. *Prothorax* very large and wide (for a *Leistus*), the hinder portion, although not so broad as the anterior, being as wide as the base of the elytra; the sides almost equally rounded throughout, and broadly margined (or recurved); generally also (especially in immature examples, when they are somewhat pellucid) a little paler, or more rufescent, at the sides: with some large punctures in front and at the base, and a broad fovea on either side, behind. *Elytra* remarkably convex and elliptic, being much rounded at the shoulders, where they are of exactly the same breadth as the base of the prothorax; finely striated, the striæ being delicately crenate; and more or less pale testaceous at their extreme apex. *Antennæ*, *palpi* and *legs* (all of which are extremely long, especially the hinder pair of the last) pale-testaceous.

This important addition† to the Madeiran fauna is one of the most extraordinary *Leisti* with which I am acquainted, its posteriorly unconstricted head and prothorax (the latter of which is immensely developed and broad, and greatly margined at the sides), in conjunction with its convex, elliptical, and *crenate*-striated elytra, and the remarkable length of its posterior legs, giving it a character which it is impossible to mistake. In its curiously elliptical body, indeed, and elongated limbs, it offers a striking parallel to the anomalous *Elliptosoma Wollastonii*,—which recedes so notoriously from its European ally in (amongst many others) those same particulars. It was detected by myself, beneath moist stones, in the lofty sylvan district of the Cruzinhas, at the beginning of July 1855. It would appear how-

† Whether this insect be the *Nebria dilatata* of Dejean's Catalogue, which is stated to come from Madeira, I am unable to say. It is of but little consequence, however, whether it is so or not, seeing that the name (which is a mere *Catalogue* one) cannot in any way interfere with that which I have given above. Nevertheless, it is by no means impossible that it may be the insect to which Dejean referred; for although it would be of course unpardonable to mistake a *Leistus* for a *Nebria*, when dissected, the *L. ellipticus* is, at the same time, so anomalous in its general contour and aspect, that it might have been hastily quoted as a *Nebria*, *in a Catalogue*, without subjecting the author (who perhaps had not critically examined it) to any very serious charge of inaccuracy.

ever to be extremely rare, since I only secured eight specimens during an encampment of ten days upon the spot; and amongst the vast material lately submitted to me by Mr. Mason, collected in all parts of the island, I have merely discovered a pair,—obtained, I imagine (judging from the species with which it is associated), from the same district as my own.

Genus 7. **NOTIOPHILUS.**

Dumeril, *Consid. gén. sur les Ins.* 169 (1823).

16. **Notiophilus geminatus.**

Notiophilus geminatus, *Dej., Spec. des Col.* v. 589 (1831).
—— ——, *Woll., Ins. Mad.* 17 (1854).

Inhabits Madeira and the two southern Dezertas, occurring (sparingly) at intermediate elevations. It is found also in the Canarian Group.

(Subfam. IV. HARPALIDES.)

(Div. 1. CHLÆNIIDEA.)

Genus 8. **ELLIPTOSOMA.**

Wollaston, *Ins. Mad.* 18. tab. 1. f. 2 (1854).

Although I recorded my conviction, in 1854, that the present genus might prove eventually to be distinct from *Loricera* proper, it is not until now that I have ventured to separate it therefrom; and I have been induced to do so, mainly, through the strongly expressed opinion of my friend Dr. Schaum of Berlin, who for some time past has been paying great attention to the structural details of the *Geodephaga*, and who has communicated to me his reasons for regarding the Madeiran insect as generically dissimilar from the European one. "*L. Wollastonii*," says he, "is a very distinct genus (*Elliptosoma*). The *Loricerœ* form a cluster of little groups like those around *Omophron*, having a number of peculiarities which occur nowhere else. The insertion of the antennæ is one of the principal characters; others are, the organization of the jaws, of the maxillæ, the epimera of the mesothorax, touching the coxæ, &c. In *Loricera* proper the epimera of the *meta*thorax are indistinct, being connate with the episterna (a rare exception amongst the *Carabidæ* with emarginated tibiæ), whereas in *Elliptosoma* they are distinct." I call especial attention to this latter fact, observed by Dr. Schaum, because it was overlooked by myself in the *Insecta Maderensia*. The

other points in which *Elliptosoma* disagrees with the typical *Loricerœ* may be readily gathered by a reference to that work.

17. Elliptosoma Wollastonii.

Loricera Wollastonii, *Javet, Bull. de la Soc. Ent. de France* (2ième série), x. 23 (1852).
—— ——, *Woll., Ins. Mad.* 19. tab. 1. f. 2 (1854).

Inhabits the damp sylvan districts of Madeira proper, between the limits of about 2500 and 5000 feet above the sea. Rare.

Genus 9. EURYGNATHUS.

Wollaston, *Ins. Mad.* 20. tab. 1. f. 1 et 3 (1854).

18. Eurygnathus Latreillei.

Licinus Latreillei, *Laporte, Etud. Ent.* i. 83 (1834).
—— ——, *Casteln., Hist. Nat. des Ins. Col.* i. tab. 8. f. 9 (1840).
Eurygnathus Latreillei, *Woll., Ins. Mad.* 21. tab. 1. f. 1 et 3 (1854).

Inhabits Porto Santo (as well as the Ilheo de Baixo, adjoining it) and the Dezerta Grande, occurring beneath stones during the spring and early summer months. On the Dezerta Grande it assumes a distinct variety, both in outline and size.

(Div. 2. PTEROSTICHIDEA.)

Genus 10. ZARGUS.

Wollaston, *Ins. Mad.* 22. tab. 1. f. 4, 5 et 6 (1854).

Although disagreeing, in many of its most important structural features, with the members of *both* the *Chlœniidea* and *Pterostichidea*, of the *Harpalides*, I am inclined to think that the present genus (from its close affinity with *Calathus*) is more naturally placed at the commencement of the latter, than (as located in the *Insecta Maderensia*) at the end of the former, of those subdivisions. And I am further confirmed in this opinion, through a note† lately communicated to me by Dr. Schaum of Berlin, who has been paying considerable attention to the generic details of the *Carabidæ*.

† "Your genus *Zargus*," observes Dr. Schaum, in a letter recently received, "is very interesting: its lower lip is that of a Troncatipenn, as you pointed out, whilst it clearly belongs to *Calathus*, *Anchomenus*, &c. From the *Chlœnii* it differs in the clothing of its male feet,—the essential character of that group."

19. Zargus Schaumii.

Zargus Schaumii, *Woll., Ins. Mad.* 23. tab. 1. f. 5 (1854).

Inhabits the intermediate elevations of Madeira proper,—descending, however, on the northern side of the island to the level of shore.

20. Zargus Desertæ.

Zargus Desertæ, *Woll., Ins. Mad.* 24. tab. 1. f. 4 (1854).

Inhabits the extreme summits of the two southern Dezertas,—being tolerably abundant, during the winter and spring, on the Dezerta Grande, though apparently scarcer on the Bugio.

21. Zargus pellucidus.

Zargus pellucidus, *Woll., Ins. Mad.* 25. tab. 1. f. 6 (1854).

Inhabits Madeira and the Dezerta Grande; occurring in the damp and sylvan districts of the former, of intermediate and lofty elevations; and towards the summit of the latter, between the crevices of the weather-beaten rocks. Exceedingly rare.

Genus 11. PRISTONYCHUS.

Dejean, *Spec. des Col.* iii. 43 (1828).

22. Pristonychus alatus.

Pristonychus alatus, *Woll., Ins. Mad.* 27 (1854).

Inhabits Madeira and Porto Santo; occurring, not uncommonly, along the southern coasts,—though principally at low elevations and in the vicinity of the towns. It is found also in Teneriffe.

Genus 12. CALATHUS.

Bonelli, *Observat. Ent.* i. tab. syn. (1809).

23. Calathus vividus.

Carabus vividus, *Fab., Syst. Eleu.* i. 194 (1801).
—— ——, *Schön., Syn. Ins.* i. 199 (1806).
Calathus vividus, *Woll., Ins. Mad.* 29 (1854).

Inhabits the mountains of Madeira proper, attaining its maximum in the loftiest elevations.

24. Calathus complanatus.

Calathus complanatus (*Kollar*), *Dej., Spec. des Col.* iii. 73 (1828).
—— —— (——), *Woll., Ins. Mad.* 30 (1854).

Inhabits every island of the Madeiran Group,—assuming several

modifications, according to the altitude and spot at which it is found. It ranges from the sea-shore to the summits of the peaks, but attains its maximum in the intermediate districts.

25. **Calathus fuscus.**

Carabus fuscus, *Fab., Syst. Ent.* i. 158 (1792).
—— ambiguus, *Payk., Fna Suec.* i. 165 (1798).
Harpalus fuscus, *Gyll., Ins. Suec.* ii. 126 (1810).
Calathus fuscus, *Woll., Ins. Mad.* 31 (1854).

Inhabits the grassy mountain-slopes of Madeira proper, ranging from about 4000 feet above the sea to the extreme summits of the peaks.

Genus 13. **ANCHOMENUS.**

Bonelli, *Observat. Ent.* i. tab. syn. (1809).

26. **Anchomenus pallipes.**

Carabus pallipes, *Fab., Syst. Eleu.* i. 187 (1801).
—— albipes, *Illig., Mag. für Ins.* i. 54 (1801).
Anchomenus pallipes, *Dej., Spec. des Col.* iii. 119 (1828).
—— ——, *Woll., Ins. Mad.* 33 (1854).

Inhabits Madeira proper, occurring everywhere at the edges of the streams,—though more particularly in lofty elevations. There is a specimen in the British Museum, from Dr. Heinecken's collection, stated to have come from Porto Santo; but I have not myself observed the species, during my repeated researches, in that island.

27. **Anchomenus marginatus.**

Carabus marginatus, *Linn., Fna Suec.* [nec *Syst. Nat.*] 222 (1761).
Harpalus marginatus, *Gyll., Ins. Suec.* ii. 154 (1810).
Agonum marginatum, *Dej., Spec. des Col.* iii. 133 (1828).
Anchomenus marginatus, *Woll., Ins. Mad.* 33 (1854).

Inhabits the mountains of Madeira proper, occurring in swampy spots (especially in the region of the Fanal) at about 5000 feet above the sea. Rare.

Genus 14. **OLISTHOPUS.**

Dejean, *Spec. des Col.* iii. 176 (1828).

28. **Olisthopus Maderensis.**

Olisthopus Maderensis †, *Woll., Ins. Mad.* 35. tab. 1. f. 7 (1854).

Inhabits Madeira and the two southern Dezertas,—occurring

† In the *Insecta Maderensia* I offered a suggestion as to the probability of the present *Olisthopus* being identical with the *O. glabratus*, of Brullé, from the Canary Islands,—with the description of which it appeared in many respects to

abundantly in the former, from about 2000 feet above the sea to the extreme summits of the mountains; and on the highest peaks of the latter, where it assumes a large, pale, and exceedingly well-marked variety.

29. **Olisthopus acutangulus,** n. sp.

O. ovatus subconvexus nigro-fuscus æneoscens, prothorace rotundato, elytris profunde striatis, ad humeros acutioribus, singulo punctis tribus impresso, interstitiis distinctius subgranulatis, margine et suturâ vix pallidioribus, antennis pedibusque infuscatis.
Long. corp. lin. 3.

O. similar to the *O. Maderensis*, but altogether darker, and with the elytra much more coarsely *alutaceous* (and therefore less shining). *Head* and *prothorax*, also, just perceptibly narrower; the *elytra* much more deeply striated, and with their *shoulders more acute*; and the limbs considerably darker,—the *antennæ* and *palpi* being infuscated-ferruginous, and the *legs* infuscated-testaceous.

The above addition to our fauna has been lately communicated by Mr. Bewicke, and was discovered in the south of Madeira proper by Mr. M. Park. It is particularly interesting as approaching, in its deeply-striated elytra and acute humeral angles, the Canarian *O. glabratus*; and as affording therefore strong presumptive evidence that the nearly-allied forms, *glabratus*, *acutangulus*, *Maderensis* and *Ericæ*, are no local modifications of each other, but true (though, as it were, consecutive) species of a well-defined geographical type. The specimen in the British Museum was presented by Mr. Bewicke.

30. **Olisthopus Ericæ.**

Olisthopus Ericæ, *Woll., Ins. Mad.* 37. tab. 1. f. 8 (1854).

Inhabits the mountains of Madeira proper, ranging from about the

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agree. Since that volume was published, however, I have received a specimen from Prof. Heer of Zurich, which was collected by M. Hartung in Lancerota, and which I have not the slightest doubt whatsoever is Brullé's insect; and after a careful comparison of it with the Madeiran one, I am inclined to consider it as undoubtedly distinct. There is no question that the two approach each other very closely; and I would regard them therefore as nearly-related species of a somewhat local type. The Canarian representative may be known from all the varieties of the Madeiran one, by the shoulders of its elytra being much more produced forwards, and terminating in an exceedingly well-defined angle: the rim, also, at that particular part, is considerably more thickened, or elevated, than is the case in its Madeiran ally. The elytra of the *O. glabratus* are, likewise, a trifle less convex and more parallel at the sides, as well as a little more deeply striated, than those of the *O. Maderensis*; they are also more shining, being free from the minutely subgranulose or alutaceous sculpture, which (beneath the microscope) is so evident in that insect; and in the single example now before me, there is scarcely any indication of paleness along the suture, and the dorsal impressions (so conspicuous in the Madeiran representative) are excessively minute.

altitude of 4000 to 5000 feet, and harbouring principally beneath the loose outer fibre of the *Erica arborea* and *scoparia*, Linn.

31. **Olisthopus elongatus.**

Olisthopus elongatus, *Woll., Ins. Mad.* 38 (1854).

Inhabits, sparingly, the mountains of Madeira and Porto Santo,—ranging lower than either of the preceding species, and descending occasionally to almost the level of the sea. In Porto Santo I have only taken it within the fortress on the extreme summit of the Pico do Castello. It occurs also in the Canary Islands, having been captured by M. Hartung in Lancerota.

Genus 15. **ARGUTOR.**

(Megerle) Steph., *Ill. Brit. Ent.* i. 102 (1828).

32. **Argutor robustus.**

Argutor robustus, *Woll., Ins. Mad.* 40 (1854).

Inhabits the mountains of Madeira proper, occurring beneath stones and fallen leaves,—particularly in the pine-woods of intermediate elevations.

33. **Argutor gracilipes.**

Argutor gracilipes, *Woll., Ins. Mad.* 41 (1854).

Inhabits the mountains of Madeira proper,—descending, however, on the northern side of the island to the level of the shore.

34. **Argutor dilaticollis.**

Argutor dilaticollis, *Woll., Ins. Mad.* 42 (1854).

Inhabits the mountains of Madeira proper, attaining its maximum in the damp sylvan districts towards the north of the island.

35. **Argutor curtus.**

Argutor curtus, *Woll., Ins. Mad.* 43 (1854).

Inhabits the mountains of Madeira proper, occurring principally in the moist ravines, and ranging perhaps somewhat lower than the three preceding species.

Genus 16. **OMASEUS.**

(Ziegler) Steph., *Ill. Brit. Ent.* i. 112 (1828).

36. **Omaseus nigerrimus.**

Feronia nigerrima, *Dej., Spec. des Col.* iii. 291 (1828).
Pterostichus simplicipunctatus, *Kollar, in litt.*
Omaseus nigerrimus, *Woll., Ins. Mad.* 45 (1854).

Inhabits Madeira proper, occurring in swampy spots, of a low elevation, in the vicinity of Funchal. Excessively rare.

37. **Omaseus Wollastoni.**

Pterostichus Wollastoni, *Heer, in litt.*
Omaseus Wollastoni, *Woll., Ins. Mad.* 46. tab. 1. f. 9 (1854).

Inhabits spots of a rather low elevation in the south of Madeira proper (having been first detected by Prof. Heer on the Cabo Gerajão, or Brazen Head, during February 1851); and in December 1856 a single example was discovered in Porto Santo by Mr. Bewicke. Very rare.

Genus 17. **AMARA.**

Bonelli, *Observat. Ent.* i. (1809).

38. **Amara trivialis.**

Harpalus trivialis, *Gyll.* [nec *Dufts.*], *Ins. Suec.* ii. 140 (1810).
Amara trivialis, *Dej., Spec. des Col.* iii. 464 (1828).
—— ——, *Heer, Fna Col. Helv.* 94 (1841).
—— ——, *Woll., Ins. Mad.* 47 (1854).

Inhabits Madeira and Porto Santo,—occurring, sparingly, from the level of the shore to an altitude of about 4000 feet.

39. **Amara superans.**

Amara superans, *Woll., Ins. Mad.* 48 (1854).

Inhabits the mountains of Madeira, at a high elevation,—the only spot in which I have hitherto detected it being near the Ice-House Peak, at an altitude of about 5500 feet. Exceedingly rare.

(Div. 3. HARPALIDEA.)

Genus 18. **ANISODACTYLUS.**

Dejean, *Spec. des Col.* iv. 132 (1829).

40. **Anisodactylus binotatus.**

Carabus binotatus, *Fab., Ent. Syst.* i. 151 (1792).
Harpalus binotatus, *Gyll., Ins. Suec.* ii. 122 (1810).
Anisodactylus binotatus, *Dej., Spec. des Col.* iv. 140 (1829).
—— ——, *Woll., Ins. Mad.* 49 (1854).

Inhabits Madeira proper, occurring beneath stones along the edges

of the streams at nearly all elevations,—though more particularly abundant at an altitude of about 2000 feet.

Genus 19. **HARPALUS.**

Latreille, *Gen. Crust. et Ins.* i. 201 (1806).

41. **Harpalus attenuatus.**

Harpalus attenuatus, *Steph., Ill. Brit. Ent.* i. 152 (1828).
—— consentaneus, *Dej., Spec. des Col.* iv. 302 (1829).
—— attenuatus, *Woll., Ins. Mad.* 51 (1854).
—— consentaneus, *Leon Fairm., Faun. Ent. Franç.* (*Col.*) 141 (1854).

Inhabits Madeira, Porto Santo and the Dezerta Grande, attaining on the last of those islands a rather larger size than on the others. It is more especially abundant from about 1500 to 3000 feet above the sea. It is recorded, also, in the Canarian Group.

42. **Harpalus litigiosus.**

Harpalus litigiosus, *Dej., Spec. des Col.* iv. 361 (1829).
—— ——, *Heer, Fna Col. Helv.* 111 (1841).
—— ——, *Woll., Ins. Mad.* 52 (1854).
—— ——, *Leon Fairm., Faun. Ent. Franç.* (*Col.*) 134 (1854).
—— Wollastoni, *Dawson, Geod. Brit.* 144 (1854).

Inhabits Madeira and Porto Santo,—occurring, during the spring, in low sunny spots towards the southern and eastern coasts.

43. **Harpalus distinguendus.**

Carabus distinguendus, *Dufts., Fna Austr.* ii. 76 (1812).
Harpalus distinguendus, *Dej., Spec. des Col.* iv. 274 (1829).
—— ——, *Heer, Fna Col. Helv.* 106 (1841).
—— ——, *Woll., Ins. Mad.* 52 (1854).

Inhabits Madeira and Porto Santo, occurring in tolerable abundance at nearly all elevations.

44. **Harpalus vividus.**

Harpalus vividus, *Dej.* [nec *Fab.* 1801], *Spec. des Col.* iv. 332 (1829).
—— ——, *Woll., Ins. Mad.* 53 (1854).

Inhabits all the islands of the Madeiran Group, presenting several slight varieties, according to the altitude and locality in which it occurs. It is found likewise in the Canary Islands.

Genus 20. **OPHONUS.**

(Ziegler) Steph., *Ill. Brit. Ent.* i. 159 (1828).

45. Ophonus obscurus.

Carabus obscurus, *Fab., Ent. Syst.* i. 151 (1792).
Harpalus obscurus, *Sturm, Deutsch. Fna*, iv. 85 (1818).
Ophonus obscurus, *Steph., Ill. Brit. Ent.* i. 160 (1828).
—— ——, *Woll., Ins. Mad.* 58 (1854).

Inhabits Madeira proper; exceedingly rare. The only indigenous specimen which I have seen was captured by myself at the edges of a small stream at the Forno de Cal, near São Vincente, on the 2nd of July 1850. It is now in the British Museum.

Genus 21. STENOLOPHUS.

(Megerle) Steph., *Ill. Brit. Ent.* i. 165 (1828).

46. Stenolophus Teutonus.

Carabus Teutonus, *Schrank, Enum. Ins. Austr.* 214 (1781).
—— vaporariorum, *Fab.* [nec *Linn.* 1761], *Ent. Syst.* i. 164 (1792).
Stenolophus vaporariorum, *Dej., Spec. des Col.* iv. 407 (1829).
—— Teutonus, *Woll., Ins. Mad.* 59 (1854).

Inhabits Madeira proper, occurring in moist spots and by the edges of the streams,—more especially from about 1000 to 3000 feet above the sea. It is found also in the Canary Islands.

47. Stenolophus dorsalis.

Carabus dorsalis, *Fab., Ent. Syst.* i. 165 (1792).
Acupalpus dorsalis, *Dej., Spec. des Col.* iv. 446 (1829).
Stenolophus dorsalis, *Erich., Käf. der Mark Brand.* i. 61 (1837).
—— ——, *Woll., Ins. Mad.* 60 (1854).

Inhabits Madeira proper, occurring in similar spots as the last species, but much more rarely,—the only localities in which I have hitherto detected it being the Forno de Cal (near São Vincente) and Feijãa d'Ovelha. It is recorded also in the Canarian Group.

Genus 22. BRADYCELLUS.

Erichson, *Käf. der Mark Brand.* i. 64 (1837).

48. Bradycellus fulvus.

Carabus fulvus, *Mshm, Ent. Brit.* i. 456 (1802).
Trechus fulvus, *Steph., Ill. Brit. Ent.* i. 169 (1828).
Acupalpus harpalinus, *Dej., Spec. des Col.* iv. 471 (1829).
Bradycellus fulvus, *Woll., Ins. Mad.* 61 (1854).

Inhabits, sparingly, the mountains of Madeira proper,—differing, however, from its European state, in being invariably apterous.

49. **Bradycellus excultus.**

Bradycellus excultus, *Woll.*, *Ins. Mad.* 61. tab. ii. f. 4 (1854).

Inhabits the mountains of Madeira proper, assuming two distinct forms,—one in which the prothorax is pale (or nearly so), and another in which it is dark. Very rare.

Genus 23. **TRECHUS.**

Clairville, *Ent. Helv.* ii. 23 (1806).

50. **Trechus fimicola.**

Trechus fimicola [script., per errorem, *fimicolus*], *Woll.*, *Ins. Mad.* 63 (1854).

Inhabits Madeira proper, generally at low elevations. I have taken it hitherto only in the gardens of Funchal, and at Santa Anna. Rare.

51. **Trechus nigrocruciatus.**

Trechus nigrocruciatus, *Woll.*, *Ins. Mad.* 64. tab. ii. f. 1 (1854).

Inhabits the mountains of Madeira proper, attaining its maximum towards the upper limits of the sylvan districts. It does however, in some localities, descend considerably lower, as I have captured it at S. Antonio da Serra, and Mr. Mason in the Boa Ventura, at about 2500 feet above the sea. Rare.

52. **Trechus lævis,** n. sp.

T. subovatus nitidissimus depressus nigro-piceus, prothorace subquadrato basi leviter angustato angulis ipsis posticis acuminatis, elytris latiusculis lævissime striatis, striis exterioribus evanescentibus, limbo læte flavo-testaceo, antennis subrobustis infuscatis, pedibus pallidis.
Long. corp. lin. $1\frac{1}{2}$–$1\frac{3}{4}$.

T. subovate, depressed, exceedingly shining, and piceous-black. *Prothorax* subquadrate, but more evidently narrowed behind than in the *T. flavomarginatus*, and with its extreme posterior angles, moreover, more distinctly thickened and prominent. *Elytra* rather wider, a little more rounded at the sides, and much less deeply striated, than in that species,—the outer striæ indeed being evanescent: also, more brightly and broadly margined with pale-testaceous. *Antennæ* and *legs* as in that insect,—the *former*, however, being just perceptibly longer and more robust.

In the *Insecta Maderensia* I recorded this insect as a variety of the following one, but a further acquaintance with it (resulting from

the examination of additional specimens) has induced me to consider it as distinct. There can be no doubt that it approaches the *T. flavomarginatus* very closely, nevertheless the many small characters which it possesses are so constant that I cannot but regard its claims for separation as sufficiently well expressed. Thus it is, upon the whole, a little larger, brighter, and more flattened than that species; its prothorax is a trifle more narrowed behind, and with its posterior angles more acuminated; its elytra are a little broader, and more rounded at the sides, and with their striæ (the lateral ones of which are obsolete) very much fainter; and its antennæ are just perceptibly longer and more robust. It appears to be rare, the only districts in which I have found it being the upper extremity of the Boa Ventura, and the Cruzinhas,—both of a high elevation.

53. **Trechus flavomarginatus.**

Trechus flavomarginatus †, *Woll., Ins. Mad.* 65. tab. ii. f. 2 (1854).

Inhabits the mountains of Madeira proper, abounding everywhere within the sylvan districts,—from about 2000 to 5000 feet above the sea.

54. **Trechus signatus,** n. sp.

T. subovatus nitidus nigro-piceus, prothorace subquadrato basi leviter angustato angulis ipsis posticis acuminatis, elytris sat profunde striatis, striis exterioribus minus impressis, capite toto, prothoracis lateribus necnon elytrorum limbo testaceis, antennis subrobustis infuscatis, pedibus pallidis.
Long. corp. lin. $1\frac{1}{2}$–$1\frac{2}{3}$.

T. just perceptibly smaller than, and not quite so broad as, the *T. lævis*,—the elytra being somewhat less rounded at the sides; also not quite so highly polished. *Head* and *prothorax*, except a broad dorsal patch (or stripe) extending the entire length of the *latter*, dull-testaceous. *Elytra* with the same character of colouring as in that insect, except that the dark central portion is not *so* dark,—being somewhat browner, and of a more *unequal* hue (at any rate when immature): also more deeply striated than in that species, the dorsal striæ being strongly impressed, though the outer ones are fainter.

The present very singularly coloured *Trechus* was detected by myself at S. Antonio da Serra in June of 1855, beneath fallen leaves at the head of the Santa Cruz ravine. It would seem however to be rare, since I only obtained six specimens during a fortnight's sojourn

† The *var.* β of the *Insecta Maderensia* must be cancelled, it having been erected into the preceding species,—the *T. lævis*.

within a mile of the actual spot in which it occurred. It is in some respects intermediate between the *T. lævis* and *dilutus*, nevertheless the peculiarity of its colouring will at once separate it from them both; whilst, in addition to the other characters above enumerated, which serve to distinguish it from the former, it may be readily known from the latter by, *inter alia*, its somewhat shorter elytra (which are less narrowed about the shoulders), and by its much more quadrate prothorax.

55. Trechus dilutus.

Trechus dilutus †, *Woll., Ins. Mad.* 66 (1854).

Inhabits the mountains of Madeira proper, occurring in wet places in company with the *T. flavomarginatus*, though only at lofty elevations. Rare.

56. Trechus umbricola.

Trechus umbricola, *Woll., Ins. Mad.* 67. tab. ii. f. 3 (1854).

Inhabits the mountains of Madeira proper, occurring in the damp sylvan districts of intermediate and lofty elevations.

57. Trechus quadricollis.

Trechus quadricollis, *Woll., Ins. Mad.* 68 (1854).

Inhabits the mountains of Madeira proper, and is hitherto unique,—the single example which has been as yet detected being in the British Museum.

58. Trechus custos.

Trechus custos, *Woll., Ins. Mad.* 68 (1854).

Inhabits the mountains of Madeira proper, occurring abundantly throughout the sylvan districts,—though especially towards their upper limits.

59. Trechus alticola.

Trechus alticola, *Woll., Ins. Mad.* 69 (1854).

Inhabits the mountains of Madeira proper, occurring in open grassy spots of the loftiest elevations,—the only locality in which I have hitherto detected it (and in which it has been also taken by Mr. Bewicke) being an upland ridge between the Ice-House Peak and the Pico dos Arieros.

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† In the description of this species, given in the *Insecta Maderensia*, attention should have been called to the length of the antennæ, which are distinctly longer than those of its allies. The size moreover might have been registered as slightly larger, some of the specimens which I have since obtained being nearly two lines in length.

60. Trechus cautus.

Trechus cautus, *Woll., Ins. Mad.* 70 (1854).

Inhabits the mountains of Porto Santo, occurring beneath stones on the open grassy slopes,—principally of the highest elevations. Rare.

Genus 24. THALASSOPHILUS.

Wollaston, *Ins. Mad.* 71. tab. ii. fig. 5 (1854).

61. Thalassophilus Whitei.

Thalassophilus Whitei, *Woll., Ins. Mad.* 71. tab. ii. fig. 5 (1854).

Inhabits Madeira and Porto Santo, occurring beneath shingle (especially in brackish spots) at the mouths of the streams. Exceedingly rare.

(Subfam. V. BEMBIDIADES.)

Genus 25. BEMBIDIUM.

Latreille, *Gen. Crust. et Ins.* i. 183 [script. Bembidion] (1806).

(Subgenus **Tachys**, *Ziegl.*)

62. Bembidium Fockii.

B. ovatum rufo-testaceum, prothorace subquadrato convexo, elytris ventricosis dorso fortiter punctato-striatis, striis exterioribus obsoletis, antennis pedibusque pallido-testaceis.
Long. corp. lin. $1\frac{1}{2}$.

Bembidium Fockii, *Hummel, Ess. Ent.* ii. 27 (1822).
—— bisulcatum, *Nicolaï, Col. Hal.* [teste *Cat. de Stettin*, 1849] (1822).
Trechus latipennis, *Sturm, Deutsch. Fna*, vi. 95. tab. 152. f. C (1825).
Bembidium silaceum, *Dej., Spec. des Col.* v. 50 (1831).
—— Guerinii, *Gaubil, in Rev. Zool.* 342 (1844).
—— Numidicum, *Lucas, Col. de l'Algérie*, 79. pl. 10. f. 3 (1849).
—— Fockii, *Duval, Ann. de la Soc. Ent. de France* (2ième série), x. 189 (1852).
—— ——, *Leon Fairm., Faun. Ent. Franç.* (*Col.*) 155 (1854).

B. ovate, shining, and rufo-testaceous. *Prothorax* convex, subquadrate and a little narrowed behind; much narrower than the elytra; very distinctly margined at the sides, especially towards the posterior angles,—which are a good deal raised, and somewhat acute (or prominent). *Elytra* rather ventricose, and widest a little behind the middle: each with a strongly punctured, deep, and entire stria close to the suture, and with three more,—well marked towards the base, but gradually shorter posteriorly; the outer ones obsolete: the recurved portion (at the apex) of the sutural stria very deep and sinuated. *Antennæ* and *legs* pale-testaceous.

The specimen from which the above description has been compiled is unique, as Madeiran, and is now in the British Museum. It was detected by myself amongst shingle at the edges of the stream in the Ribeira do Alcayde, between Feijãa d'Ovelha and Porto Moniz, on the 6th of July 1855. It is a species of rather wide geographical range, being recorded in France, Switzerland, the Tyrol, and Algeria; and I have seen an example which was captured by E. Armitage, Esq., in Turkey.

63. Bembidium bistriatum.

Elaphrus bistriatus (*Meg.*), *Dufts.*, *Fna Austr.* ii. 205 (1812).
Tachys minutissimus (*Leach*), *Steph.*, *Ill. Brit. Ent.* ii. 7 (1829).
Bembidium bistriatum, *Dej.*, *Spec. des Col.* v. 42 (1831).
—— ——, *Woll.*, *Ins. Mad.* 73 (1854).

Inhabits Madeira proper, occurring amongst moss on the wet ledges of the rocks, and by the small trickling streams, at rather low and intermediate elevations.

64. Bembidium curvimanum.

Bembidium curvimanum, *Woll.*, *Ins. Mad.* 74. tab. ii. f. 6 (1854).

Inhabits Madeira and Porto Santo,—being rare in the former (where I have only taken it at the Lamucciras and at the mouth of the Ribeira da Janella stream), but rather common in the eastern ravines of the latter. Sometimes the rufescent patches of the elytra (especially the humeral ones) are obsolete, under which circumstances it should be regarded as a distinct variety,—the var. β.

65. Bembidium Lucasii.

Bembidium Lucasii, *Duval*, *Ann. de la Soc. Ent. de France* (2ième série), x. 137 (1852).
—— ——, *Woll.*, *Ins. Mad.* 75 (1854).

Inhabits Madeira proper, occurring at low and intermediate elevations,—from the gardens of Funchal to about 2000 feet above the sea.

66. Bembidium obtusum.

Bembidium obtusum, *Sturm*, *Deutsch. Fna*, vi. 165 (1825).
Tachys obtusus, *Steph.*, *Ill. Brit. Ent.* ii. 6 (1829).
Bembidium obtusum, *Dej.*, *Spec. des Col.* v. 177 (1831).
—— ——, *Woll.*, *Ins. Mad.* 75 (1854).

Inhabits all the islands of the Madeira group, except the Northern Dezerta (on which at least it has not yet been detected),—occurring at all altitudes.

(Subgenus **Ocys,** *Kby.*)

67. **Bembidium dubium,** n. sp.

B. lurido-ferrugineum, prothorace transverso-quadrato angulis posticis acutis, ad latera valde marginato, elytris plus minus subiridescenti-nigrescentibus sed in disco antico dilutioribus, leviter punctato-striatis, singulo pone medium puncto impresso, antennis ferrugineis, pedibus testaceis.
Long. corp. lin. $2\frac{2}{3}$.

B. elongate-ovate, shining, and reddish- or lurid-ferruginous. *Prothorax* transverse-quadrate, the sides broadly margined, and the posterior angles exceedingly acute; with a dorsal channel, and an impression on either side at the base. *Elytra* more or less black (and with an iridescent tinge), the region about the scutellum and fore-disk being paler; not much rounded at the sides; rather finely punctate-striated, the outer striæ being evanescent; and with a large impressed point on the third interstice of each, behind the middle. *Antennæ* robust, and ferruginous. *Legs* pale-testaceous.

The specimen from which the above description has been compiled was detected in the south of Madeira proper by Mr. M. Park, and has been lately communicated to me (and presented to the British Museum) by Mr. Bewicke. It is very nearly related to the *B. rufescens* of more northern latitudes, of which it may possibly be a mere geographical state; nevertheless (judging from the single example now before me) it is rather larger and less ovate than that species, its posterior prothoracic angles are perhaps not quite so prominent, the coloration of its elytra (unless my specimen be immature) is different, its legs are just perceptibly longer, and its antennæ are more robust,—the terminal joint, especially, being shorter and less slender than in those of its European ally.

(Subgenus **Peryphus,** *Meg.*)

68. **Bembidium Atlanticum.**

Bembidium Atlanticum, *Woll., Ins. Mad.* 77 (1854).

Inhabits Madeira and Porto Santo, occurring amongst shingle at the edges of the streams,—the specimens from the latter island being very much paler, on the average, than those from the former.

69. **Bembidium tabellatum.**

Bembidium tabellatum, *Woll., Ins. Mad.* 79 (1854).

Inhabits Madeira proper, occurring in company with the *B. Atlan-*

ticum, though much more rarely. It is the representative of the *B. tibiale* of higher latitudes, of which it may possibly be but a geographical state.

70. Bembidium elongatum.

Bembidium elongatum, *Dej., Spec. des Col.* v. 148 (1831).
—— ——, *Heer, Fna Col. Helv.* 134 (1841).
—— ——, *Woll., Ins. Mad.* 79 (1854).

Inhabits Madeira proper, occurring in damp spots and by the edges of the streams, at intermediate and lofty elevations.

(Subgenus **Lopha**, *Meg.*)

71. Bembidium Schmidtii.

Bembidium Schmidtii, *Woll., Ins. Mad.* 80 (1854).

Inhabits Madeira and Porto Santo, attaining its maximum by the edges of the streams of a high elevation,—though descending, occasionally, on the northern side of both islands to spots of a comparatively low altitude. It is the representative of the European *B. callosum*, Küst., of which it may perhaps be an extreme local modification. It occurs also in the Canarian Group, a specimen having been lately forwarded to me by Prof. Heer of Zurich which was collected by M. Hartung in Teneriffe.

Sectio II. HYDRADEPHAGA.

Fam. 2. DYTISCIDÆ.

Genus 26. **COLYMBETES.**

Clairville, *Ent. Helv.* ii. 198 (1806).

72. Colymbetes Lanio.

Dytiscus Lanio, *Fab., Ent. Syst.* i. 190 (1792).
—— ——, *Oliv., Ent.* iii. 40. 19. pl. 2. f. 9 (1795).
Colymbetes Lowei, *G. R. Gray, Griff. A. K. Ins.* i. pl. 32. f. 2 (1830).
—— Lanio, *Aubé, Hydrocanth.* 221 (1838).
—— ——, *Woll., Ins. Mad.* 82 (1854).

Inhabits Madeira proper, occurring in the streams of intermediate and lofty altitudes.

Genus 27. AGABUS.

Leach, *Zool. Miscell.* iii. 69. 72 (1817).

73. Agabus bipustulatus*.

Dytiscus bipustulatus, *Linn., Syst. Nat.* ii. 667 (1767).
—— ——, *Fab., Syst. Eleu.* i. 263 (1801).
Agabus bipustulatus, *Aubé, Hydrocanth.* 357 (1838).
—— ——, *Woll., Ins. Mad.* 83 (1854).

Inhabits the rivers and pools of Madeira proper, occurring at nearly all elevations.

74. Agabus nebulosus*.

Dytiscus nebulosus, *Forster, Nov. Spec. Ins.* 56 (1771).
—— bipunctatus, *Fab., Mant. Ins.* 190 (1787).
Colymbetes nebulosus, *Steph., Ill. Brit. Ent.* ii. 72 (1829).
Agabus bipunctatus, *Aubé, Hydrocanth.* 328 (1838).
—— nebulosus, *Woll., Ins. Mad.* 84 (1854).

Inhabits Madeira and the two northern Dezertas,—the typical state (in which the prothorax is immaculate†) for these islands being that which is aberrant throughout Europe generally. It occurs also in the Canarian Group.

75. Agabus Maderensis.

Agabus Maderensis, *Woll., Ins. Mad.* 85 (1854).

Inhabits the streams and Levadas of Madeira proper, attaining its maximum in the higher altitudes, though occurring towards the northern coast at a comparatively low elevation.

Genus 28. HYDROPORUS.

Clairville, *Ent. Helv.* ii. 183 (1806).

76. Hydroporus vigilans.

Hydroporus vigilans, *Woll., Ins. Mad.* 86 (1854).

Inhabits the streams of Madeira proper, occurring abundantly at intermediate and lofty elevations, and descending on the northern side of the island to the level of the shore.

† Out of 51 specimens which I have lately examined (16 of which are from Madeira proper, 22 from the Ilheo Chão, and 13 from the Dezerta Grande), *six only* have the two prothoracic patches which are almost universally indicated in more northern latitudes, developed. Hence, the immaculate state must be regarded as typical for these islands; and the "*var.* β," therefore, of the *Insecta Maderensia* must take the precedence of the diagnosis.

77. **Hydroporus Lyellii**, n. sp.

H. oblongo-ovalis tenuiter pubescens, supra pallide testaceus, infra niger, prothorace ad latera oblique subrecto, postice angustissime nigro-marginato necnon maculâ sat magnâ submediâ (marginem nigrum attingente) utrinque notato, angulis posticis acutis, elytro singulo lineis quinque latissimis nigris valde confluentibus ornato. Long. corp. lin. 2–2¼.

H. oblong-oval (being a little less straightened about the middle than the preceding species), and clothed with an exceedingly minute, whitish pubescence; above pale-testaceous, below black. *Head* dusky along its hinder region. *Prothorax* rather short; and nearly straight (though oblique) at the sides, being broadest behind,—where its angles are acute; with a few large but shallow punctures towards its anterior and posterior margins,—the latter of which is always, and the former sometimes, narrowly edged with black; with a tolerably large and well-defined patch on either side of the hinder disk, and confluent with the darkened posterior margin, likewise black. *Elytra* with the suture, and five very wide longitudinal lines on each, more or less confluent, and sometimes covering nearly the entire surface, black,—leaving, however, the apex and outer margin, and a space on each contiguous with the latter (and a little before the middle), more broadly testaceous, or free from markings, than any other portion of the surface.

The present *Hydroporus* was discovered by myself, in a brackish stream towards the north of Porto Santo, during April of 1855. It is clearly the representative of the *H. Ceresyi* of Mediterranean latitudes,—if indeed it be not, in reality (of which I am by no means convinced), the selfsame species altered by the local influences to which it has been so long exposed. Since Dr. Schaum, however, of Berlin, to whom I submitted it for examination, regards it as distinct, and since it does certainly possess many features of its own (whether natural or acquired) by which it may be instantly recognized from its ally, I have retained it as such,—dedicating it to Sir Charles Lyell, whose researches in Madeira have thrown so much light on the geology of those islands. It may be at once known from the *H. Ceresyi* by its rather smaller size and more darkened surface,—both its prothoracic patches and elytral lines being much more developed than those of that insect. The former indeed, which are exceedingly minute in the European species, are here of a considerable size, and *confluent with the hinder darkened margin*; whilst the latter are increased to such an extent as to run into each other, and almost to cover the entire surface. From the Madeiran *H. vigilans* its diminished bulk and minutely pubescent body, in conjunction with

the straightened sides of its posteriorly widened prothorax, and the reduced dimensions of its (almost obsolete) series of impressed elytral points, will, apart from many other characteristics, readily separate it.

78. **Hydroporus confluens***.

Dytiscus confluens, *Fab.*, *Ent. Syst.* i. 198 (1792).
Hyphydrus confluens, *Gyll.*, *Ins. Suec.* i. 522 (1808).
Hygrotus confluens, *Steph.*, *Ill. Brit. Ent.* ii. 47 (1828).
Hydroporus confluens, *Aubé*, *Hydrocanth.* 557 (1838).
—— ——, *Woll.*, *Ins. Mad.* 87 (1854).

Inhabits all the islands of the Madeiran Group, except the southern Dezerta, on which there is apparently no water for it to exist in. Out of 75 specimens which I have examined (one of which is from Madeira proper, 25 from Porto Santo, 3 from the Dezerta Grande, and 46 from the Ilheo Chão), there is not a single instance in which the anterior portion of the fourth elytral line (so long and conspicuous in European examples generally) is not obsolete. This little difference therefore, although slight, must be regarded as a strictly geographical one.

Fam. 3. GYRINIDÆ.

Genus 29. **GYRINUS.**

Linnæus, *Syst. Nat.* ii. 567 (1767).

79. **Gyrinus natator****.

Dytiscus natator, *Linn.*, *Fna Suec.* 779 (1761).
Gyrinus natator, *Linn.*, *Syst. Nat.* 567 (1767).
—— ——, *Fab.*, *Ent. Syst.* i. 202 (1792).
—— ——, *Aubé*, *Hydrocanth.* 664 (1838).
—— ——, *Woll.*, *Ins. Mad.* 88 (1854).

Inhabits Madeira proper, and is hitherto unique,—the only specimen which I have seen (and which may possibly have been accidentally introduced from more northern latitudes) having been collected by the late Dr. Heinecken. It is now in the British Museum.

Sectio III. PHILHYDRIDA.

Fam. 4. PARNIDÆ.

Genus 30. PARNUS.

Fabricius, *Ent. Syst.* i. 245 (1792).

80. Parnus prolifericornis.

Parnus prolifericornis, *Fab.*, *Ent. Syst.* i. 245 (1792).
—— ——, *Gyll.*, *Ins. Suec.* i. 139 (1808).
—— ——, *Steph.*, *Ill. Brit. Ent.* ii. 103 (1829).
—— ——, *Woll.*, *Ins. Mad.* 90 (1854).

Inhabits Madeira proper, occurring abundantly at the edges of the pools and streams at nearly all elevations. It is found, likewise, in the Canarian Group.

Fam. 5. HYDROPHILIDÆ.

Genus 31. OCHTHEBIUS.

Leach, *Zool. Miscell.* iii. 91 (1817).

81. Ochthebius 4-foveolatus.

Ochthebius 4-foveolatus, *Mots.*, *in litt.*
—— ——, *Woll.*, *Ins. Mad.* 91 (1854).

Inhabits the rivers of Madeira and Porto Santo; locally abundant.

82. Ochthebius rugulosus, n. sp.

O. ovatus æneus, capite prothoraceque profunde punctatis necnon (præsertim illo) dense granulosis, hoc canaliculato, utrinque foveâ brevi profundâ subcurvatâ versus angulos anticos impresso, elytris rugose punctato-striatis.
Long. corp. lin. $1\frac{1}{8}$–$1\frac{1}{4}$.

O. ovate, brassy, and shining. *Head* and *prothorax* deeply, but not very closely, punctured: the *former* densely granulated; and with a curved impression on either side of the forehead, between the eyes: the *latter* less granulated than the head; wide anteriorly, and with the sides somewhat straightened behind; with a dorsal channel, and a short, deep, distinct, somewhat curved fovea towards either anterior angle (which is more or less rufescent); and with just traceable indications of a curved transverse depression on the centre of its hinder disk. *Elytra* rather acuminated posteriorly,

and widest a little behind the middle; coarsely punctate-striated, with scarcely any indications of pubescence (even beneath the microscope), and concolorous. *Antennæ* and *legs* pale-testaceous, —the club of the *former*, and the extreme apex of the *tarsi* being dark.

In a few specimens which I possess, the entire insect (except the limbs) is of a piceous, or brownish-black, hue; such examples, however, are both scarce and aberrant.

The present *Ochthebius* is clearly the representative of the *O. pygmæus* of more northern latitudes,—exactly as the following one is that of the *O. marinus*. Both of them, however, possess so many characters, of form, sculpture and colour (if not indeed of structure likewise), which are essentially their own, that it is scarcely possible to regard them, however near the relation, as local modifications of their European allies. The *O. rugulosus* differs from the *pygmæus* in being rather larger, more brassy, and much more acuminated posteriorly; in its prothorax being altogether wider (especially in front) and with the lateral impression deeper and more curved; and in its head and prothorax being much more rugulose and granulated, with the forehead more depressed. The club of the antennæ, likewise, is darker, as also more abrupt and obtuse, than is the case in that insect. The species was detected by myself in one of the streams in the north of Porto Santo, during April 1855.

83. **Ochthebius subpictus,** n. sp.

O. ovalis gracilis subænescens, capite prothoraceque viridescentibus necnon dense granulosis, hoc foveâ magnâ brevi transversâ lunulatâ in disco postico impresso, ad latera late membranaceo, elytris pallidioribus, punctato-striatis, subtiliter pubescentibus, obscurissime nigro-pictis.

Long. corp. lin. 1–1$\frac{1}{8}$.

O. a little more oval (as also smaller and slenderer) than the last species, likewise paler, somewhat less shining, and not so brassy. *Head* and *prothorax* very closely granulated, but with scarcely any punctures intermixed; and of a more metallic tinge than the rest of the surface,—the depressions being generally of a greenish, and the elevations of a brassy hue: the *former* with a curved impression on either side of the forehead, between the eyes: the *latter* wide anteriorly, and more filled-out behind, with a membranous margin, than is the case in the *O. rugulosus*; with no appearance of a dorsal channel, but with a large, short, deep, transverse, lunulate depression on the centre of its hinder-, and a much shallower, obscurer and straightened one (of the same breadth) on its fore-disk; also with very obscure indications of a curved and interrupted longitudinal costa, or raised line, on each

side of the dorsal region; and unequally impressed towards either anterior angle (which is a little paler than the rest of the pronotum). *Elytra* rather acuminated posteriorly, and widest about the middle, being a little less expanded than in the last species; paler and less metallic than the head and prothorax, and just perceptibly ornamented with broken fasciæ or bands (which are comparatively distinct when the specimens are pale and immature, but which in darker examples are occasionally so fused into each other as to be scarcely traceable); less coarsely punctate-striated than the *O. rugulosus*, and more evidently pubescent,—the pubescence moreover having a tendency to be disposed in longitudinal rows. *Limbs* as in the last species, but a trifle shorter perhaps and somewhat paler.

Differs from the *O. marinus* in being more rounded at the shoulders and acuminated behind; in its prothorax being altogether wider, and much more filled-in with a membranous margin towards its hinder angles; in its head and prothorax being less shining, and much more coarsely and densely granulated; and in its elytra being distinctly pubescent, and generally pretty evidently mottled with darker, clouded spots, or interrupted bands,—after the ordinary fashion of the *Helophori*. The species was found in Porto Santo, in company with the two preceding ones.

Genus 32. **CALOBIUS.**

Wollaston, *Ins. Mad.* 92. tab. ii. f. 7 (1854).

84. **Calobius Heeri.**

Calobius Heeri, *Woll., Ins. Mad.* 92. tab. ii. f. 7 (1854).

Inhabits Madeira and Porto Santo, occurring amongst marine *Confervæ* in pools of unadulterated sea-water left by the tide on the rocks. The specimens from Porto Santo (where I detected it during April of 1855) are, on the average, decidedly larger, and somewhat more brassy, than those from Madeira: such examples I would regard as the *var.* β.

Genus 33. **LIMNEBIUS.**

Leach, *Zool. Miscell.* iii. 93 (1817).

85. **Limnebius grandicollis.**

Limnebius grandicollis, *Woll., Ins. Mad.* 94 (1854).

Inhabits Madeira proper, occurring in the small streams and pools of a lofty elevation.

Genus 34. **LACCOBIUS.**

Erichson, *Käf. der Mark Brand.* i. 202 (1837).

86. **Laccobius minutus.**

Chrysomela minuta, *Linn., Fna Suec.* 166 (1761).
Hydrophilus bipunctatus, *Fab., Syst. Eleu.* i. 254 (1801).
Laccobius minutus, *Erich., Käf. der Mark Brand.* i. 203 (1837).
—— ——, *Woll., Ins. Mad.* 95 (1854).

Inhabits the smaller streams of Madeira and Porto Santo, being confined principally to the higher altitudes,—the specimens from the latter island (where I first detected it in 1855) being rather larger and paler than those from the former. Rare. It occurs also in the Canarian Group.

Genus 35. **HYDROBIUS.**

Leach, *Zool. Miscell.* iii. 93 (1817).

87. **Hydrobius Marchantiæ**, n. sp.

H. subglobosus niger, antice nitidus et sat distincte punctulatus, postice subopacus et lævius punctulatus, prothoracis lateribus diluto-testaceis, elytris punctulis minutissimis superinjectis ubique (sed præsertim apicem versus) confertissime obsitis, singulo striâ suturali posticâ leviter impresso, ad apicem plus minus dilutioribus, pedibus rufo-piceis.
Long. corp. lin. $1\frac{1}{3}$–$1\frac{1}{2}$.

H. subglobose, but rather acuminated at its apex, black, shining and distinctly punctured anteriorly, but more opake and less evidently punctured posteriorly,—the punctures being denser and coarser on the head than on the prothorax, and on the prothorax than on the elytra. *Prothorax* with the sides, and its extreme anterior margin, more or less diluted-testaceous. *Elytra* with a very lightly-impressed sutural line on each, behind; and (in addition to the other punctures) closely beset with an under-sculpture of most delicately impressed points (perceptible only beneath the microscope),—these minute punctules, however, becoming gradually more evident as we approach the apex [—a peculiarity which at once accounts for the greater opacity of the surface in that particular region]; the apex more or less obscurely diluted-testaceous (sometimes entirely concolorous with the rest of the surface). *Wings* obsolete. *Palpi* and *antennæ* testaceous,—the club of the *latter* being darker (and very obtuse and abrupt). *Legs* rufo-piceous.

The comparatively large size of the present *Hydrobius* will, apart from other differences, at once distinguish it from its Madeiran ally, the *H. conglobatus*; whilst the approximation which it displays to the peculiarity of sculpture which obtains in that insect, in conjunc-

tion with the obtuseness of its antennal club (the terminal joint of which is, as there, exceedingly globose), and its apterous body, immediately stamp it as a member of the same geographical type. Its habits are somewhat dissimilar from those of the following species, which resides in the small trickling streams of a very lofty elevation: for all the specimens of the *H. Marchantiæ* which I have yet detected were obtained from beneath the dense masses of the *Marchantia polymorpha*, L., which mat the surfaces of the dripping rocks, at the edges of the waterfalls, at low and intermediate altitudes. In such situations I frequently took it, along the northern coast of Madeira proper,—especially between São Vincente and Seisal, and at the Passa d'Areia, near Ponta Delgada,—during the summer of 1855.

88. **Hydrobius conglobatus.**

Hydrobius conglobatus, *Woll., Ins. Mad.* 97 (1854).

Inhabits the small streams, and other moist spots, of Madeira proper, on the upper limits of the sylvan districts. Very rare.

Genus 36. **PHILHYDRUS.**

Solier, *Ann. de la Soc. Ent. de France*, iii. 315 (1834).

89. **Philhydrus melanocephalus.**

Hydrophilus melanocephalus, *Oliv., Ent.* iii. 39. 14 (1795).
Hydrobius melanocephalus, *Erich., Käf. der Mark Brand.* i. 209 (1837).
Philhydrus melanocephalus, *Muls., Palp.* 137 (1844).
—— ——, *Woll., Ins. Mad.* 98 (1854).

Inhabits the streams of Porto Santo, presenting two distinct states of colouring,—a lighter and a darker one. Common.

Fam. 6. SPHÆRIDIADÆ.

Genus 37. **DACTYLOSTERNUM.**

Wollaston, *Ins. Mad.* 99. tab. iii. f. 1 (1854).

90. **Dactylosternum Roussetii.**

Dactylosternum Roussetii, *Woll., Ins. Mad.* 100. tab. iii. f. 1 (1854).

Inhabits the south of Madeira proper, occurring on and near the sea-beach in the immediate vicinity of Funchal,—especially in the empty shells of crabs, and amongst other filthy *rejectamenta*, in the neighbourhood of the drains and sewers. Exceedingly local.

Genus 38. SPHÆRIDIUM.

Fabricius, *Syst. Eleu.* i. 92 (1801).

91. Sphæridium bipustulatum*.

Sphæridium bipustulatum, *Fab.*, *Spec. Ins.* i. 78 (1781).
Dermestes 4-maculatus, *Mshm*, *Ent. Brit.* 66 (1802).
Sphæridium bipustulatum, *Muls.*, *Palpic. de France*, 154. var. B. (1844).
—— ——, *Woll.*, *Ins. Mad.* 101 (1854).

Inhabits Madeira and Porto Santo, occurring in the dung of cattle at low and intermediate elevations.

Genus 39. CERCYON.

Leach, *Zool. Miscell.* iii. 95 (1817).

92. Cercyon littorale*.

C. oblongo-ovale minus convexum nigrum nitidum crebre et minutissime punctulatum, capite subporrecto antice latius truncato, prothorace basi leviter angustato, elytris sat profunde subpunctato-striatis, ad apicem plus minus dilutioribus, pedibus piceo-ferrugineis.
Variat colore picescentiore, prothoracis lateribus dilutioribus.
Long. corp. lin. $1\frac{1}{8}$–$1\frac{1}{3}$.

Sphæridium littorale, *Gyll.*, *Ins. Suec.* i. 111 (1808).
Cercyon littorale, ruficorne, binotatum et dilatatum, *Steph.*, *Ill. Brit. Ent.* ii. 137. 138 (1829).
—— ——, *Muls.*, *Palpic. de France*, 172 (1844).

C. oblong-oval, less convex than any of the other species here enumerated, black or piceous-black, shining; and rather closely and minutely punctulated all over. *Head* rather more porrected than in any of the following species, and more broadly truncated in front. *Prothorax*, also, with the sides more rounded anteriorly, and a little *narrowed* at its base,—the widest part being about, or rather before, the middle; occasionally somewhat diluted in colouring towards the edges. *Elytra* rather deeply subpunctate-striated, particularly behind; more or less brightly testaceous at the apex; and at times, also, with their lateral edges and shoulders slightly diluted in colouring. *Antennæ at base*, and the *palpi*, diluted-testaceous; the *former* with the club darker. *Legs* piceo-ferruginous.

The discovery in these islands of the common European *C. littorale* is due to Mr. Mason, from whom I have lately received many specimens, taken near Funchal,—and clearly, from the insects with which they are associated (*Dactylosternum Roussetii*, *Saprinus nitidulus*, *Psammodius sabulosus*, &c.), on or near the Funchal *beach*. It is a species, in fact, peculiar to the sea-shore,—occurring beneath de-

caying *Algæ*, and other *rejectamenta*, in most of the maritime countries of Europe. The Madeiran examples differ in no respect from the ordinary English ones, except that they are perhaps, on the average, a trifle smaller.

93. Cercyon inquinatum.

Cercyon inquinatum, *Woll., Ins. Mad.* 103 (1854).

Inhabits the south of Madeira proper, being found in similar spots with the *Dactylosternum Roussetii*.

94. Cercyon fimetarium.

Cercyon fimetarium, *Woll., Ins. Mad.* 103 (1854).

Inhabits Madeira and Porto Santo, occurring in the dung of cattle at nearly all elevations.

95. Cercyon centrimaculatum*.

Sphæridium centrimaculatum, *Sturm, Deutsch. Fna*, ii. 23 (1807).
—— pygmæum, *Gyll., Ins. Suec.* i. 104. var. *b* (1808).
Cercyon centrimaculatum, *Muls., Palpic. de France*, 169 (1844).
—— ——, *Woll., Ins. Mad.* 104 (1854).

Inhabits Madeira and Porto Santo,—in company, generally, with the preceding species.

96. Cercyon quisquilium*.

Scarabæus quisquilius, *Linn., Fna Suec.* 138 (1761).
Sphæridium unipunctatum, var., *Fab., Ent. Syst.* i. 82 (1792).
Cercyon quisquilium, *Muls., Palpic. de France*, 166 (1844).
—— ——, *Woll., Ins. Mad.* 105 (1854).

Inhabits Madeira and Porto Santo, being found in similar spots with the preceding two.

Sectio IV. NECROPHAGA.

Fam. 7. SILPHIDÆ.

Genus 40. CATOPS.

Paykull, *Fna Suec.* i. 342 (1798).

97. Catops velox.

Choleva velox, *Spence, Linn. Trans.* xi. 154 (1809).
Ptomophagus velox, *Steph., Ill. Brit. Ent.* iii. 6 (1830).
Catops velox, *Erich., Käf. der Mark Brand.* i. 243 (1837).
—— ——, *Woll., Ins. Mad.* 106 (1854).

Inhabits moist spots within the sylvan districts of Madeira proper. Rare.

Fam. 8. PTILIADÆ.

Genus 41. ACRATRICHIS.

Motschulsky, *Bull. de la Soc. Imp. de Moscou*, xxi. 569 (1848).

98. Acratrichis umbricola.

Acratrichis umbricola, *Woll., Ins. Mad.* 108 (1854).

Inhabits the moist sylvan districts of Madeira proper, occurring beneath fallen leaves at a lofty elevation. Since the publication of the *Insecta Maderensia*, I have had the advantage of Mr. Haliday's opinion on this large *Acratrichis*; and considering the great attention which he has paid to the *Ptiliadæ*, the following note respecting it will not be regarded as out of place. "The *A. umbricola*," says he, "is a fine and very distinct species, and seems to come nearest to the *atomaria*, I think, of all our British forms, rather surpassing it in its most peculiar characters,—viz. convexity, breadth of thorax, elongated hind angles of the latter, and silken pubescence."

99. Acratrichis fascicularis.

Latridius fascicularis, *Hbst, Käf.* v. 8. t. 44. f. 7 (1793).
Trichopteryx fascicularis, *Heer, Fna Col. Helv.* i. 374 (1841).
—— grandicollis, *Erich., Nat. der Ins. Deutsch.* iii. 20 (1848).
Acratrichis fascicularis, *Woll., Ins. Mad.* 108 (1854).

Inhabits Madeira proper, occurring beneath leaves and other vegetable refuse at low and intermediate altitudes.

100. Acratrichis pumila.

Trichopteryx sericans, *Gillm., in Sturm, Deutsch. Fna*, xvii. 52 (1845).
—— pumila, *Erich., Nat. der Ins. Deutsch.* iii. 22 (1848).
Acratrichis pumila, *Mots., Bull. de la Soc. Imp. de Moscou*, xxi. 568 (1848).
—— ——, *Woll., Ins. Mad.* 109 (1854).

Inhabits Madeira proper, occurring in similar spots as the last species.

101. Acratrichis obscœna, n. sp.

A. oblonga utrinque subacuta depressiuscula, subtiliter pubescens nigra, prothorace elytrorum latitudine, angulis posticis acutis, elytris pectore parum longioribus, abdomine multo brevioribus, antennis breviusculis basi piceis, palpis femoribus coxisque piceis, tibiis tarsisque testaceis.

Variat (immatura) pedibus fere totis et antennarum articulis primo et secundo testaceis, elytris fusco-testaceis apice pallidioribus.

Long. corp. lin. $\frac{1}{3}$–vix $\frac{1}{2}$.

Trichopteryx obscœna, *Haliday, in litt.*

A. oblong, deep-black (except when immature), rather distinctly punctured, pubescent, and slightly shining. *Head* triangular, more acute in front (between the antennæ) than in any of the preceding species,—the labrum being prominent. *Prothorax* rather short, and scarcely broader than the elytra; almost equally rounded at the sides, and with its posterior angles slightly produced and concolorous with the rest of the surface. *Elytra* two-thirds longer than the prothorax, and jointly as long as broad; with their hinder margin a little paler; of nearly equal breadth to two-thirds of their length, and from thence gently rounded; and very much shorter than the abdomen,—which is greatly lengthened-out, so that its four or five hinder segments are exposed. *Antennæ* shorter and darker than in any of the other species here enumerated, and with the basal joint of their club somewhat smaller; the first and second joints more or less rufo-piceous. *Legs* testaceous,—except the *femora* and *coxæ*, which are rufo-piceous. *Hind coxæ* of moderate size.

The oblong outline of the present *Acratrichis*, which is more acute both before and behind than its Madeiran allies, in conjunction with the shape of its prothorax, its shorter and darker antennæ, and its much-lengthened, exposed abdomen, will at once distinguish it from the remainder of the genus here enumerated. I am indebted to Mr. Haliday, not only for comparing it carefully with his large collection of the *Ptiliadæ*, but also for correcting my diagnosis of it; and I am glad to be enabled to state, on his authority, that he believes it to be unquestionably new, since his extensive acquaintance with the members of this minute family renders his opinion doubly valuable. In its elongated form and pointed head it agrees with the *suffocata*, Hal.; but Mr. Haliday remarks that that species he believes "to be most closely allied to the first group of the genus (*atomaria*, *grandicollis*, *fascicularis*, &c.), by the more significant characters of the form of prothorax, the very large hind coxæ, and the broader and more keeled mesosternum;" whilst the Madeiran *obscœna* he regards "as more akin, by its less widened prothorax (the basal angles of which are less produced), smaller hind coxæ, and the narrower keel of its mesosternum, to the *sericans*," &c. Mr. Haliday has indeed been kind enough to grant me the loan of his typical specimens of the *suffocata* (discovered by himself in the county of Cork); and, in addition to the above (almost sectional) characters, of prothorax, mesosternum and coxæ, it is very much larger and broader than the *obscœna*, its abdomen is not quite so much uncovered (three or four segments only being visible, instead of four or five), and its antennæ are longer and paler.

The *A. obscœna* was detected by myself, beneath the dung of cattle,

to the westward of Funchal (both at the Gorgulho and the Praya Formoza), during the summer of 1855.

Genus 42. **PTENIDIUM.**

Erichson, *Nat. der Ins. Deutsch.* iii. 34 (1848).

102. **Ptenidium apicale.**

Ptilium apicale, *Sturm, in litt.*
Trichopteryx apicalis, *Gillm., in Sturm, Deutsch. Fna,* xvii. 85 (1845).
Ptenidium apicale, *Erich., Nat. der Ins. Deutsch.* iii. 36 (1848).
—— ——, *Woll., Ins. Mad.* 110 (1854).

Inhabits Madeira and the Dezerta Grande, abounding beneath fallen leaves, and other vegetable refuse, at low and intermediate altitudes.

Fam. 9. PHALACRIDÆ.

Genus 43. **OLIBRUS.**

Erichson, *Nat. der Ins. Deutsch.* iii. 113 (1848).

103. **Olibrus Cinerariæ.**

Olibrus Cinerariæ, *Woll., Ins. Mad.* 112. tab. ii. f. 9 (1854).

Inhabits the mountains of Madeira proper, infesting the flowers of the *Cineraria aurita* (=*Senecio Maderensis,* DeCand.). Very rare.

104. **Olibrus bicolor.**

Sphæridium bicolor, *Fab., Ent. Syst.* i. 82 (1792).
Phalacrus bicolor, *Gyll., Ins. Suec.* iii. 431 (1813).
Olibrus bicolor, *Erich., Nat. der Ins. Deutsch.* iii. 116 (1848).
—— ——, *Woll., Ins. Mad.* 113 (1854).

Inhabits Madeira proper, occurring (in flowers) at rather low and intermediate altitudes.

105. **Olibrus liquidus.**

Phalacrus ovatus, *Hoffm., in mus.*
Olibrus liquidus, *Erich., Nat. der Ins. Deutsch.* iii. 117 (1848).
—— ——, *Woll., Ins. Mad.* 114 (1854).

Inhabits Madeira proper, being found in similar spots with the *O. bicolor.*

106. **Olibrus consimilis*.**

Dermestes consimilis, *Mshm, Ent. Brit.* i. 75 (1802).
Phalacrus geminus, *Illig., in Panz. Krit. Rev.* i. 27 (1805).
—— testaceus, *Gyll., Ins. Suec.* iii. 432 (1813).
Olibrus geminus, *Erich., Nat. der Ins. Deutsch.* iii. 120 (1848).
—— consimilis, *Woll., Ins. Mad.* 115 (1854).

Inhabits the intermediate elevations of Madeira proper. Rare.

Fam. 10. NITIDULIDÆ.

Genus 44. CARPOPHILUS.

(Leach) Steph., *Ill. Brit. Ent.* iii. 50 (1830).

107. Carpophilus mutilatus**.

Nitidula hemiptera, *Fab.* [nec *Linn.* 1767], *Ent. Syst.* i. 261 (1792).
Carpophilus mutilatus, (*Hoffm.*) *Erich., Germ. Zeitsch. für die Ent.* iv. 258 (1843).
—— ——, —— *Woll., Ins. Mad.* 116 (1854).

Inhabits the warehouses and stores of Madeira proper, occurring in and around Funchal,—especially in dried fruits and sugar. Introduced.

108. Carpophilus auropilosus**.

Carpophilus auropilosus, *Woll., Ins. Mad.* 117 (1854).

Inhabits Madeira proper, occurring in similar places as the last. It has been taken by Mr. Bewicke (by whom the specimen in the British Museum collection was presented) in sugar, and by Mr. Mason in arrowroot. The description of this species, in the *Insecta Maderensia*, having been drawn up from a single example, one or two characters, to which attention should have been called, were not sufficiently noticed. It may be well to mention, therefore, that it is narrower and more oblong than the *C. mutilatus*, and that its abdomen is more produced (or lengthened-out) behind. There are likewise obscure indications of an oblique and much-suffused rufescent dash, reaching from the shoulder to the disk of each elytron,—which in some cases however would appear to be merely traceable about the humeral region, and in others (as, for instance, the specimen which I originally described) to be altogether evanescent.

109. Carpophilus hemipterus**.

Dermestes hemipterus, *Linn., Syst. Nat.* ii. 567 (1767).
Nitidula bimaculata, *Oliv., Ent.* ii. 12. 6 (1790).
Carpophilus hemipterus, *Erich., Nat. der Ins. Deutsch.* iii. 135 (1848).
—— ——, *Woll., Ins. Mad.* 117 (1854).

Inhabits Madeira proper, occurring (in and around Funchal) in similar spots as the two preceding species,—and being, like them, evidently introduced. It is found also in the Canary Islands.

Genus 45. NITIDULA.

Fabricius, *Syst. Ent.* 77 (1775).

110. **Nitidula flexuosa*.**

Nitidula flexuosa, *Oliv.*, *Ent.* ii. 12. 7 (1790).
—— ——, *Fab.*, *Ent. Syst.* i. 258 (1792).
—— ——, *Erich.*, *Nat. der Ins. Deutsch.* iii. 159 (1848).
—— ——, *Woll.*, *Ins. Mad.* 119 (1854).

Inhabits Porto Santo, occurring in bones.

111. **Nitidula 4-pustulata*.**

Nitidula 4-pustulata, *Fab.*, *Ent. Syst.* i. 255 (1792).
—— ——, *Heer*, *Fna Col. Helv.* 401 (1841).
—— ——, *Erich.*, *Nat. der Ins. Deutsch.* iii. 160 (1848).
—— ——, *Woll.*, *Ins. Mad.* 119 (1854).

Inhabits Madeira proper, occurring in bones, at low and intermediate elevations.

112. **Nitidula discoidea*.**

Nitidula discoidea, *Fab.*, *Ent. Syst.* 78 (1775).
—— ——, *Heer*, *Fna Col. Helv.* 398 (1841).
Omosita discoidea, *Erich.*, *Nat. der Ins. Deutsch.* iii. 168 (1848).
Nitidula discoidea, *Woll.*, *Ins. Mad.* 120 (1854).

Inhabits Madeira proper, being found in similar situations as the last species.

113. **Nitidula colon*.**

N. oblongo-ovata fusco-nigra, prothorace antice profunde emarginato, in disco postico bifoveolato, ad latera late ferrugineo, elytris ubique sed præsertim pone medium testaceo-maculatis.
Long. corp. lin. $1\frac{1}{3}$.

Silpha colon, *Linn.*, *Fna Suec.* 151. 462 (1761).
Nitidula colon, *Fab.*, *Syst. Eleu.* i. 351 (1801).
—— ——, *Heer*, *Fna Col. Helv.* 396 (1841).
Omosita colon, *Erich.*, *Nat. der Ins. Deutsch.* iii. 167 (1848).

N. oblong-ovate, being of the same form as the *N. discoidea* (though more pubescent, and a little more coarsely punctured); brownish-black. *Prothorax* deeply emarginated in front, short and transverse, the sides and the anterior margin generally broadly and brightly ferruginous; its surface not quite so uneven as that of the last species, though with the two foveæ on the centre of its hinder disk more rounded and deep. *Elytra* with several small and obscure spots towards the base and apex, and a larger, brighter and well-defined one on the hinder disk of each (and confluent at the suture, so as to form an irregular postmedial fascia), testaceous. *Limbs* brownish-ferruginous.

A specimen of the common European *N. colon* (now in the British Museum) was detected by myself, during the summer of 1855, in a

garden at Funchal; and two more, taken near Funchal in bones, have been lately communicated by Mr. M. Park.

114. **Nitidula obsoleta***.

Nitidula obsoleta, *Fab., Ent. Syst.* i. 256 (1792).
—— ——, *Heer, Fna Col. Helv.* 398 (1841).
Epuræa obsoleta, *Erich., Nat. der Ins. Deutsch.* iii. 148 (1848).
Nitidula obsoleta, *Woll., Ins. Mad.* 121 (1854).

Inhabits Madeira proper, occurring (sparingly) beneath the bark and chippings of trees at intermediate altitudes.

Genus 46. **PRIA.**

(Kirby) Steph., *Ill. Brit. Ent.* iii. 49 (1830).

115. **Pria Dulcamaræ.**

Laria Dulcamaræ, *Scop., Ent. Carn.* 22 (1763).
Silpha truncatella, *Mshm, Ent. Brit.* i. 123 (1802).
Pria truncatella et Meligethes Dulcamaræ, *Steph., Ill. Brit. Ent.* iii. 45 et 50 (1830).
—— Dulcamaræ, *Woll., Ins. Mad.* 122 (1854).

Inhabits Madeira proper, being found (sparingly) in flowers at nearly all elevations.

Genus 47. **MELIGETHES.**

(Kirby) Steph., *Ill. Brit. Ent.* iii. 45 (1830).

116. **Meligethes Echii** †.

Meligethes Isoplexidis, *Woll., Ins. Mad.* 123 (1854).

Inhabits the sylvan districts of Madeira proper, being confined (so far as I have hitherto observed) to the flowers and foliage of the *Echium candicans*.

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† Although unwilling at all times to change a name which has been once imposed, I have done so in the present instance, through the conviction that such is absolutely necessary. It is to N. Mason, Esq., that I am indebted for pointing out the mistake into which I had unintentionally fallen, in regarding the plants on which (in 1850) I detected the above *Meligethes* as the *Isoplexis sceptrum*. Possessing but little knowledge of botany, and indeed not having examined the plant at all, I recorded it as the *Isoplexis*, believing that I had been informed that it was such. As this however, clearly, could not have been the case, I have altered the title of the insect accordingly.

117. **Meligethes tristis.**

Nitidula tristis, *Schupp., in litt.*
Meligethes tristis, *Sturm, Deutsch. Fna,* xvi. 40. t. 309. f. *a*, A, *b* (1845).
—— ——, *Erich., Nat. der Ins. Deutsch.* iii. 190 (1848).
—— ——, *Woll., Ins. Mad.* 124 (1854).

Inhabits Madeira, Porto Santo and the Dezerta Grande,—principally at low and intermediate altitudes.

118. **Meligethes picipes.**

Meligethes picipes, *Sturm, Deutsch. Fna,* xvi. 47. t. 310. f. *a*, A, *b* (1845).
—— ——, *Erich., Nat. der Ins. Deutsch.* iii. 199 (1848).
—— ——, *Redt., Fna Austr.* 170 (1849).
—— ——, *Woll., Ins. Mad.* 125 (1854).

Inhabits Madeira proper, occurring in flowers at nearly all elevations.

119. **Meligethes varicollis.**

Meligethes varicollis, *Woll., Ins. Mad.* 126 (1854).

Inhabits the sylvan districts of Madeira proper. Rare.

Genus 48. **XENOSTRONGYLUS.**

Wollaston, *Ins. Mad.* 127. tab. ii. f. 8 (1854).

120. **Xenostrongylus histrio.**

Xenostrongylus histrio, *Woll., Ins. Mad.* 128. tab. ii. f. 8 (1854).

Inhabits Madeira, Porto Santo, and the Dezerta Grande, occurring at low and intermediate elevations.

Genus 49. **RHYZOPHAGUS.**

Herbst, *Käf.* v. 18. tab. i. f. 7–9 [script. *Ryzophagus*] (1793).

This common European genus being an addition to the Madeiran fauna since the publication of the *Insecta Maderensia*, we may just state that it differs from the typical *Nitidulidæ* in its antennæ being only 10-articulate, and in the tarsi of its male sex being heteromerous; its labrum moreover is concealed. The species of which it is composed are narrow, linear, and free from pubescence; and their elytra are truncate at their apex. At first sight it somewhat approaches the Madeiran *Europs* (of the *Colydiadæ*); but the many and important characters which distinguish it therefrom may be at once gathered by a reference to the observations under that genus.

121. Rhyzophagus bipustulatus*.

R. linearis subdepressus piceus nitidus glaber, prothorace oblongo, profunde punctato, elytris punctato-striatis, singulo ante apicem maculâ obscurâ pallidiore ornato, antennis pedibusque rufo-ferrugineis.

Long. corp. lin. $1\frac{1}{3}$–vix 2.

Lyctus 2-pustulatus, *Fab.*, *Ent. Syst.* i. ii. 503 (1792).
Ryzophagus bipunctulatus, *Hbst*, *Käf.* v. tab. 45. f. 9 (1793).
Lyctus dispar, var. *β*, *Payk.*, *Fna Suec.* iii. 328 (1800).
Rhizophagus bipustulatus, *Erich.*, *Nat. der Ins. Deutsch.* iii. 234 (1848).

R. narrow, linear, somewhat depressed, glabrous, shining, and piceous. *Head* rather closely punctured. *Prothorax* more coarsely, but less closely, punctured than the head; oblong, narrowly margined at the sides and behind, and unchanneled. *Elytra* rather deeply punctate-striated; each with a more or less obscure paler spot towards its apex, and occasionally with indications of a smaller one at the shoulder. *Limbs* rufo-ferruginous.

The *R. bipustulatus*, so universally distributed throughout Europe, was detected in Madeira by C. Bewicke, Esq., who lately discovered it beneath the bark of Spanish chestnut-trees on the mountains above Funchal. Knowing how liable the *Rhyzophagi*, and such like insects, are to importation, amongst foreign timber, my first impression was to regard it as probably of recent introduction from more northern latitudes; but the opinion of Mr. Bewicke, that it bore the appearance of being strictly indigenous, I have since confirmed by a close examination of its characters,—observing that, like all other species of long-standing in these islands, it has become slightly modified, from the local influences to which it has been exposed. The only permanent distinction which I can perceive, in the present instance, however, is, that the prothorax of the Madeiran specimens is somewhat more laterally compressed at its anterior angles,—causing the sides to be more rounded than is the case in the European ones; and the broadest portion of it to be, not at the extreme front (as in them), but rather *behind* it. The examples in the British Museum were presented by their captor, Mr. Bewicke.

Fam. 11. COLYDIADÆ.

Genus 50. TARPHIUS.

(Germar) Erich., *Nat. der Ins. Deutsch.* iii. 256 (1848).

122. Tarphius parallelus.

Tarphius parallelus, *Woll.*, *Ins. Mad.* 134 (1854).

Inhabits the lofty sylvan districts of Madeira proper (especially in

the north of the island),—occurring beneath logs of wood in damp, shady spots. Rare.

123. **Tarphius Lowei.**

Tarphius Lowei, *Woll., Ins. Mad.* 134. tab. iii. f. 5 (1854).

Inhabits Madeira and Porto Santo, being rare in the former, but abundant in the latter. It is more particularly attached to various kinds of lichen,—whether growing in the fissures of the rocks (as in Porto Santo), or on the trunks of trees.

124. **Tarphius inornatus.**

Tarphius inornatus, *Woll., Ins. Mad.* 135 (1854).
—— spinipes, *Woll.* [maris status extrem.], *Ins. Mad.* 136 (1854).

Inhabits the sylvan districts of Madeira proper. A correction is required in the description of this species, as given in the *Insecta Maderensia*. I there stated that the four anterior tarsi of the males are simple,—the hinder ones alone having their basal joint produced on the under side into an elongated process. An examination of additional specimens has since convinced me that the front pair likewise have this primary articulation *more or less* lobed beneath; and, moreover, that there are rudiments of a similar structure (never liable, apparently, to a further development) even in the intermediate pair also. The *anterior* feet, however, would seem to be subject to variation, in this respect,—the under spiniform projection being considerably more expressed in some specimens than in others. It was to an *extreme example*, in which the fore-tarsi happened to be powerfully armed, and which was a little less parallel in its outline than is usual, that I originally gave the name of *spinipes*,—a species which, in the present Catalogue, I have suppressed.

I cannot but admit the *possibility*, however, that two species may still be indicated under the *T. inornatus*, as now defined; for nearly all the specimens which I have taken in the *south* of Madeira (where it occurs, for the most part, beneath the bark and chippings of fir-trees on the mountains above Funchal) have their antennæ just perceptibly shorter and darker than those from the interior and north of the island; whilst it is a remarkable fact, that I have not as yet observed (what I believe to be) the male sex except in the strictly sylvan regions,—where it is as common as the female. Nevertheless, as this non-detection of the males in the pine-woods of the south may have been an accidental circumstance (seeing that I have not more than thirty examples at present before me, from such positions, to judge from), and since in other respects the individuals from the

various localities are barely separable from each other, it is safer, I think, to regard them all as referable to a common stock, and to attribute the scarcity of the male sex within the fir districts (if such be really the case) to some physical peculiarity of the spot (the character of which has become so completely altered since the destruction of the native timber), than to run the risk of multiplying species unnecessarily in a somewhat difficult group.

125. **Tarphius sylvicola.**

Tarphius sylvicola, *Woll., Ins. Mad.* 137 (1854).

Inhabits the sylvan districts in the north of Madeira proper. Exceedingly rare.

126. **Tarphius rotundatus.**

Tarphius rotundatus, *Woll., Ins. Mad.* 137 (1854).

Inhabits the sylvan districts of Madeira proper, being generally pretty abundant.

127. **Tarphius Lauri.**

Tarphius Lauri, *Woll., Ins. Mad.* 138. tab. iii. f. 4 (1854).

Inhabits the sylvan districts of Madeira proper, being the most abundant of the genus.

128. **Tarphius formosus,** n. sp.

T. breviter ovatus setoso-variegatus opacus nigro-piceus, prothorace ad latera subæqualiter rotundato, granulis obsito, elytris rotundatis postice subito desilientibus sed ad apicem ipsum acuminatis rugosis subnodosis, læte rufo-maculatis.
Mas, tarsis longis gracilibus, unguiculis subrectis longissimis.
Fœm., paulo major, tarsis unguiculisque brevioribus et magis curvatis.
Long. corp. lin. $1\frac{1}{3}$–$1\frac{1}{2}$.

T. short, ovate, dull rusty-black, nearly opake, almost free from scales, but variegated with rather long, erect and rigid setæ,—some of which are black, others of a yellowish-cinereous, and a small portion of a still paler hue. *Head* and *prothorax* rough, and beset with coarse granules (which are smaller, however, and much less flattened, than those of the *T. Lauri*): the *latter* channeled, a good deal dilated about the middle, and almost equally rounded at the sides,—its widest portion, however, being narrower than the widest portion of the elytra. *Elytra* somewhat ventricose and rounded, being suddenly shortened (or bent inwards) posteriorly, though with their extreme apex acuminated; rough, the punctures and intermediate granuliform elevations being most

obscurely disposed in rows; the alternate interstices indistinctly raised and interrupted, forming large but low nodules (in the usual positions), which are more or less brightly rufescent and confluent,—tending (when confluent) to shape-out a hinder fascia, and another, arched one, in front (in addition to a round patch on the disk of each elytron), the most distinct portion of which is about the scutellum; the paler setæ, moreover, being distributed upon the nodules and fasciæ so as to give them a variegated appearance. *Femora* and *tibiæ* piceous: *antennæ* and *tarsi* pale-ferruginous.

Male smaller than the female; and with the *tarsi* and *claws* much longer, slenderer, and less curved: the feet in both sexes, however, being simple.

This most distinct and elegant little *Tarphius*, which may be at once recognized by its short, ovate outline, prettily variegated surface, and by the peculiar structure of its male feet (which are longer, slenderer, and less curved—both themselves and the claws—than those of any other members of the genus which I have as yet detected), is apparently one of the rarest of the Madeiran Coleoptera, and confined to the dense sylvan districts of intermediate elevations, in the north of Madeira proper. I captured it very sparingly on the mountains both to the east and west of the São Vincente ravine, during the summer of 1855,—namely, at the Lombo de Vaca and the Lombo dos Pecegueiros.

129. **Tarphius compactus.**

Tarphius compactus, *Woll., Ins. Mad.* 139 (1854).

Inhabits the sylvan districts of Madeira proper, particularly towards the north of the island. I stated in the *Insecta Maderensia* that this species was less distinct than most of its congeners. A further acquaintance with it has satisfied me that it is as well-characterized as any of them,—its much-incrusted surface and longer antennæ (to which last, attention was not drawn in that volume) giving it, apart from other features, a somewhat peculiar appearance.

130. **Tarphius nodosus.**

Tarphius nodosus, *Woll., Ins. Mad.* 140. tab. iii. f. 6 (1854).

Inhabits the sylvan districts of Madeira proper, especially towards their upper limits. Locally abundant.

131. **Tarphius cicatricosus.**

Tarphius cicatricosus, *Woll., Ins. Mad.* 141 (1854).

Inhabits the sylvan districts of Madeira proper, in company with the preceding. Rare.

132. Tarphius testudinalis.

Tarphius testudinalis, *Woll., Ins. Mad.* 141 (1854).

Inhabits the sylvan districts of Madeira proper, in the higher elevations. Rare. Although the tarsi of this species are simple in both sexes, attention might have been called, in the *Insecta Maderensia*, to the fact, that the feet and claws are shorter, slenderer, and less curved in the male sex than in the female.

133. Tarphius sculptipennis, n. sp.

T. subquadrato-ovatus subnitidus fusco-piceus, prothorace latiusculo ad latera subæqualiter rotundato, granulis obtusis obsito et leviter canaliculato, elytris concoloribus subæqualibus, profunde seriatim punctatis, suturâ læviore, interstitiis alternis vix elevatis nodos vix formantibus.
Long. corp. lin. $1\frac{1}{2}$.

T. squarish-ovate (being much of the same form as the *T. compactus*), light brownish-piceous (or almost ferruginous), slightly shining, and a great deal incrusted with scales,—though apparently almost free from setæ. *Head* and *prothorax* beset with close and obtuse granules: the *latter* lightly channeled, large and wide, dilated about the middle, and almost equally rounded at the sides. *Elytra* concolorous, and comparatively free from inequalities, deeply and regularly seriate-punctate (being scarcely at all transversely wrinkled, and with the punctures exceedingly large and well defined); the suture brighter and flatter than the rest of the surface; the alternate interstices but very slightly raised, and forming therefore but small nodules in the usual positions (at any rate in the sex from which the above description has been compiled). *Limbs* pale rufo-ferruginous.

The present well-marked *Tarphius*, though possessing the general outline of the *T. compactus*, is more nearly akin to the *T. testudinalis* than to any other of the species here enumerated. It may, however, be at once known from that insect by its very much smaller size, and by its more even and regularly punctured elytra,—which are not only free from the greatly-developed elevations and inequalities which are there so conspicuous, but have their immense punctures even better defined (although perhaps not quite so large) and more regular: the brightness and breadth moreover of the sutural space, or line, will serve additionally to characterize it. Two examples (both, I believe, males) were detected by myself in the north of Madeira proper, during the summer of 1855,—one at the Lombo dos Pecegueiros, and the other from off the rocks at the base of the perpendicular mountains immediately above the Forno de Cal.

134. Tarphius truncatus.

Tarphius truncatus, *Woll., Ins. Mad.* 142 (1854).

Inhabits the sylvan districts of Madeira proper. Exceedingly rare.

135. Tarphius echinatus.

Tarphius echinatus, *Woll., Ins. Mad.* 143 (1854).

Inhabits the sylvan districts of Madeira proper. Very rare.

136. Tarphius excisus, n. sp.

T. oblongus longe setosus piceus, prothorace brevi rugoso, circa medium lato dilatato, postice subito et valde angustato (quasi utrinque exciso), elytris submaculatis rugosis, interstitiis alternis elevatis interruptis nodos formantibus, antennis brevibus.
Long. corp. lin. vix $1\frac{1}{2}$.

T. oblong, rusty-piceous (when immature ferruginous), not much covered with scales, but clothed with rather long, erect and rigid setæ. *Head* and *prothorax* very rough, being beset with coarse and somewhat elevated granules: the *latter* with a broad, but exceedingly faint, dorsal channel, short, much dilated in the middle, and rounded from thence anteriorly, but suddenly and greatly narrowed (or constricted) behind, so as to appear scooped-out before the posterior angles,—which are, themselves, almost right-angles. *Elytra* parallel at the base, and suddenly bent inwards (or truncated) towards their apex; with the shoulders somewhat falling away,—a structure which, in conjunction with the curious emargination on either side of the prothorax behind, causes a considerable cavity to be left on each side (between the shoulders and the middle of the prothorax); rugosely granulated and punctured, in indistinct longitudinal rows; the alternate interstices obscurely raised, yet the interrupted portions of them distinct, and forming rather elevated (subrufescent) nodules, or ridges, in the usual positions,—the one on either side of the scutellum, at the base, being more than ordinarily developed. *Limbs* rufo-ferruginous,—the *antennæ* being particularly short.

The very singular form of the present *Tarphius*, which has its prothorax greatly rounded and widened in front, but suddenly scooped-out behind, so as to appear deeply emarginated towards either posterior angle, will, apart from other characters (of which, however, its extremely setose surface and very short antennæ should be especially observed), at once distinguish it from the remainder of the genus here enumerated. It is moreover peculiarly interesting, topographically, as being the second species yet detected beyond Madeira proper; and the *only* one which is apparently peculiar to

any of the other islands of the Group (the *T. Lowei* being found both in Madeira and Porto Santo). It was discovered by myself amongst the rocks on the lofty and almost inaccessible promontory to the north of Porto Santo, immediately over the extreme summit of the Pico Branco,—on the 9th of May 1855.

137. **Tarphius brevicollis.**

Tarphius brevicollis, *Woll., Ins. Mad.* 144 (1854).

Inhabits the sylvan districts of Madeira proper, in company with the other *Tarphii*. Very rare.

138. **Tarphius rugosus.**

Tarphius rugosus, *Woll., Ins. Mad.* 144 (1854).

Inhabits the sylvan districts of Madeira proper. Exceedingly rare.

139. **Tarphius explicatus,** n. sp.

T. quadrato-oblongus fusco-niger, prothorace rugoso amplissimo, ante medium valde dilatato explicato, postice angustato, granulis dispersis obsito, in disco late canaliculato, elytris concoloribus, rugose subseriatim granulatis, interstitiis alternis elevatis interruptis, nodos septem magnos exstantes in singulo sitos formantibus. Long. corp. lin. $2\frac{1}{3}$–$2\frac{1}{2}$.

T. quadrate-oblong, deep piceous-black, and covered with short rusty-brown setæ and scales, quite opake. *Head* and *prothorax* very rough, and beset with granules and setæ: the *latter* with a wide and deep channel on its disk; exceedingly large, and immensely dilated, about the middle, being much rounded anteriorly, but a good deal (and rather suddenly) narrowed behind; the sides very broadly flattened-out (or, as it were, unfolded) and recurved; and the hinder margin greatly sinuated, causing the posterior angles to appear produced. *Elytra* concolorous, and with the sides almost parallel, being but very slightly broader at the extreme base than elsewhere; exceedingly rough, and densely crowded with granules, short setæ, and scales; the alternate interstices raised and interrupted, forming seven very large and well-marked nodules, in the usual positions, on each elytron. *Femora* and *tibiæ* rufo-ferruginous: the *antennæ* and *tarsi* a little paler.

The largest of the Madeiran *Tarphii*, as yet detected, and of a most extraordinary appearance,—its quadrate-oblong outline and immensely developed prothorax (the sides of which are greatly flattened-out, and rounded, in front), in conjunction with its densely scaly and roughened surface, and the seven well-defined, much-elevated nodules with which each of its elytra are furnished, giving it

a character which it is impossible to mistake. The two specimens (both of which may perhaps be females) from which the above description has been compiled were captured by myself, from beneath the loosened bark of a felled tree, in the north of Madeira proper (in the remote forest-region of the Lombo dos Pecegueiros), during July of 1855.

Genus 51. COSSYPHODES.

Westwood, *Trans. Ent. Soc. Lond.* (New Series) i. 168 (1851).

My attention has been lately drawn by T. S. Leacock, Esq., of Funchal, whose accurate powers of observation I have more than once profited by, to my remark (borrowed from that of Mr. Westwood, by whom the genus was originally described), in the *Insecta Maderensia*, that the eyes of *Cossyphodes* are obsolete,—stating, that they appear to him to exist within the small oblique line with which either side of the head is furnished posteriorly. I have therefore examined, again, very closely, the structure formerly alluded to; and I am now inclined to agree with Mr. Leacock, that the eyes are certainly present,—though in so small and rudimentary a state that I doubt whether they can be of much assistance for the purpose of vision, or whether they could be defined as more than subobsolete. That they are immersed, however, within this somewhat horizontally impressed line, *at its commencement*, seems certain; nevertheless they are so minute, and so nearly concealed by its upper edge, that I am scarcely able to detect anything like facets on the small portion of their surface which is exposed to view; and I suspect therefore that the insect must be still regarded as blind,—or, at any rate, nearly so.

140. Cossyphodes Wollastonii.

Cossyphodes Wollastonii, *Westw.*, *Trans. Ent. Soc. Lond.* (New Series) i. 170 (1851).
—— ——, *Woll.*, *Ins. Mad.* 146. tab. iii. f. 3 (1854).

Inhabits the south of Madeira proper, occurring in and near ants' nests (especially those of *Œcophthora pusilla*, Heer) around Funchal. Very rare.

Genus 52. PLŒOSOMA.

Wollaston, *Ins. Mad.* 147. tab. ix. f. 9 (1854).

141. Plœosoma ellipticum.

Plœosoma ellipticum, *Woll.*, *Ins. Mad.* 148. tab. ix. f. 9 (1854).

Inhabits the sylvan regions of Madeira proper, occurring beneath

the bark of trees and in rotten wood, at intermediate and rather lofty altitudes.

Genus 53. **EUROPS.**

Wollaston, *Ins. Mad.* 149. tab. iii. f. 2 (1854).

142. **Europs impressicollis.**

Europs impressicollis, *Woll., Ins. Mad.* 150. tab. iii. f. 2 (1854).

Inhabits the Dezerta Grande; extremely rare.

Genus 54. **LYCTUS.**

Fabricius, *Ent. Syst.* i. ii. 502 (1792).

143. **Lyctus brunneus.**

Xylotrogus brunneus, *Steph., Ill. Brit. Ent.* iii. 116 (1830).
Lyctus Colydioides ?, *Dej. Cat.* (edit. 3) 338 (1837).
—— Glycyrrhizæ, *Chev., in Dej. Cat.* (edit. 3) 338 (1837).
—— brunneus, *Woll., Ins. Mad.* 152. tab. iv. f. 3 (1854).

Inhabits Madeira proper, occurring at low and intermediate elevations. Rare.

Fam. 12. TROGOSITIDÆ.

Genus 55. **TROGOSITA.**

Olivier, *Ent.* ii. 19 [script. *Trogossita*] (1790).

144. **Trogosita mauritanica****.

Tenebrio mauritanicus, *Linn., Syst. Nat.* ii. 674 (1767).
Trogossita mauritanica, *Oliv., Ent.* ii. 19. 6. pl. 1. f. 2 *a, b* (1790).
Trogosita caraboides, *Fab., Ent. Syst.* i. 115 (1792).
—— mauritanica, *Woll., Ins. Mad.* 154 (1854).

Inhabits the granaries and warehouses of Madeira proper, being introduced with stores.

145. **Trogosita serrata****.

Trogosita serrata, *Woll., Ins. Mad.* 155 (1854).

Inhabits Madeira proper, probably (like the last species) introduced with stores,—the only two specimens which I have seen (now in the British Museum) being from the collection of Dr. Heinecken.

Fam. 13. CUCUJIDÆ.

Genus 56. **BIPHYLLUS.**

(Dej. *Cat.* 1821) Steph., *Ill. Brit. Ent.* iii. 87 (1830).

It will be perceived that I have assigned a different position to

this genus, in the present Catalogue, to what I did in the *Insecta Maderensia*,—allotting it to the *Cucujidæ*, instead of the *Cryptophagidæ*. In real truth, it is a form of very difficult location, combining some of the essential characteristics of these two or three immediate families,—with any one of which it may consequently be united, provided we attach greater importance to those of its features which identify it with that particular group, than to the others. After a careful consideration however of its many peculiarities, I now think that its elevated prothoracic striæ (in which it approaches *Læmophlœus*), in conjunction with the large and securiform termination of its labial palpi, in which it assimilates *Psammœchus* and *Cryptamorpha*, and the minute fourth joint of its feet (a structure which obtains in the latter genus and *Silvanus*), are of even greater importance than those of outline and antennæ, which would assign it to the *Cryptophagidæ*; and I believe, therefore, that when placed in the present position (tending towards the *Colydiadæ*, to some of the members of which, both in its habits and biarticulate club, it makes a decided approach) it will be found, upon the whole, to be nearest to those species with which it has the greatest affinity.

Regarding the name, I will merely add, that I have restored that of Dejean's Catalogue,—which was adopted by Stephens (and accompanied by a full generic diagnosis) in 1830. It was through an oversight that I did not do this in the *Insecta Maderensia*; and it is surprising that M. Redtenbacher should have applied a different title to it, seeing that it had been properly characterized in this country nearly twenty years previous to the publication of his Fauna.

146. **Biphyllus lunatus.**

Dermestes lunatus, *Fab.*, *Ent. Syst.* i. 232 (1792).
Biphyllus lunatus, *Steph.*, *Ill. Brit. Ent.* iii. 78 (1830).
Diphyllus lunatus, *Redt.*, *Fna Austr.* 188 (1849).
——, *Woll.*, *Ins. Mad.* 172 (1854).

Inhabits Madeira proper, occurring (rarely) at intermediate elevations.

Genus 57. **CRYPTAMORPHA.**

Wollaston, *Ins. Mad.* 156. tab. iv. f. 1 (1854).

147. **Cryptamorpha Musæ.**

Cryptamorpha Musæ, *Woll.*, *Ins. Mad.* 157. tab. iv. f. 1 (1854).

Inhabits the south of Madeira proper, occurring beneath the outer fibre of the stems of the Banana (*Musa sapientum*, Linn.) in and around Funchal.

Genus 58. LÆMOPHLŒUS.

(Dej. *Cat.*, edit. 2., 315) Erich., *Nat. der Ins. Deutsch.* iii. 315 (1848).

148. Læmophlœus Donacioides.

Læmophlœus Donacioides, *Woll., Ins. Mad.* 159. tab. iii. f. 8 (1854).

Inhabits the intermediate altitudes of Madeira proper, being confined principally to the Chestnut districts. Rare.

149. Læmophlœus granulatus.

Læmophlœus granulatus, *Woll., Ins. Mad.* 160 (1854).

Inhabits Madeira proper, occurring in similar places as the last species.

150. Læmophlœus vermiculatus.

Læmophlœus vermiculatus †, *Woll., Ins. Mad.* 161 (1854).

Inhabits Madeira proper,—being found, apparently, in low elevations about Funchal.

151. Læmophlœus pusillus**.

Cucujus minutus, *Oliv.* [nec *Kugell. in Schneid. Mag.* 1791–1794], *Ent.* iv. bis 8, 9 (1795).
—— pusillus, *Schön., Syn. Ins.* iii. 55 (1817).
Læmophlœus pusillus, *Erich., Nat. der Ins. Deutsch.* iii. 321 (1848).
—— ——, *Woll., Ins. Mad.* 162 (1854).

Inhabits the granaries and houses of Madeira proper, being introduced with stores.

152. Læmophlœus ferrugineus**.

Cucujus testaceus, *Payk.* [nec *Fab.* 1792], *Fna Suec.* ii. 168 (1798).
—— ferrugineus (*Creutzer*), *Steph., Ill. Brit. Ent.* iv. 232 (1831).
Læmophlœus ferrugineus, *Erich., Nat. der Ins. Deutsch.* iii. 322 (1848).
—— ——, *Woll., Ins. Mad.* 163 (1854).

Inhabits Madeira proper, occurring with the preceding species.

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† Although still disposed to regard the *L. vermiculatus* as a distinct species, it must be admitted that it approaches very closely to the *L. clavicollis*; and especially so, as I am now inclined to believe that the character drawn from the vermiform punctuation of the head (in the single specimen from which the original diagnosis was compiled) was perhaps more apparent than real. It is however a rather smaller and narrower insect than the *clavicollis*, its antennæ are not quite so robust, and its forehead is somewhat more produced, and less broadly truncated, in front,—the lateral angles, beneath which the antennæ are inserted, being less prominent and defined. Still, I will not deny that it may possibly prove, when further specimens are detected, to be but a form of the *clavicollis* peculiar to the lower elevations.

153. Læmophlœus clavicollis.

Læmophlœus clavicollis, *Woll., Ins. Mad.* 163 (1854).

Inhabits Madeira proper, being found principally in the Chestnut woods of intermediate elevations.

154. Læmophlœus axillaris.

Læmophlœus axillaris, *Woll., Ins. Mad.* 164. tab. iii. f. 7 (1854).

Inhabits the sylvan districts of Madeira proper. Exceedingly rare.

155. Læmophlœus Stenoides.

Læmophlœus Stenoides, *Woll., Ins. Mad.* 165. tab. iii. f. 9 (1854).

Inhabits the sylvan districts of Madeira proper. Rare.

Genus 59. SILVANUS.

Latreille, *Gen. Crust. et Ins.* iii. 19 (1807).

156. Silvanus unidentatus*.

S. parallelo-elongatus angustus ferrugineus opacus, capite prothoraceque crebre et profunde ruguloso-punctatis, illo pone oculos utrinque uni-denticulato, hoc elongato basin versus angustato, angulis anticis in spinam magnam productis, elytris punctato-striatis. Long. corp. lin. $1\frac{1}{3}$–$1\frac{2}{3}$.

Ips unidentata, *Oliv., Ent.* ii. 18. 12. pl. 1. f. 4 (1790).
Dermestes unidentatus, *Fab., Ent. Syst.* i. 232 (1792).
Silvanus unidentatus, *Gyll., Ins. Suec.* iii. 405 (1813).
—— ——, *Erich., Nat. der Ins. Deutsch.* iii. 338 (1848).

S. elongate, narrow and parallel, depressed, ferruginous, slightly pubescent, and opake. *Head* and *prothorax* deeply and closely rugulose and punctate: the *former* with the sides nearly straight (though oblique) and slightly raised; and armed with a small denticle, or projection, immediately below (and touching) either eye: the *latter* elongated, and gradually narrowed posteriorly; free from ridges and grooves, and with its anterior angles produced into a long and spiniform process; minutely scooped-out (on the *upper* surface, or pronotum) at its posterior angles,—the space between the front end of this excavation and the anterior angles (amounting to nearly the entire length of the sides) being most obscurely crenulated. *Elytra* generally a little paler than the head and prothorax; punctate-striated, the alternate interstices being scarcely perceptibly raised. *Limbs* as pale as (and perhaps a little more rufescent than) the elytra.

The above addition to our fauna was detected by Mr. Bewicke (by whom the specimens in the British Museum were presented) beneath

the dead bark of Spanish chestnut-trees on the mountains to the north of Funchal. It is generally distributed throughout Europe, and is found also in England; but the Madeiran examples are altogether a little more strongly sculptured than the British ones,—with which in other respects they entirely coincide.

157. Silvanus Surinamensis**.

Dermestes Surinamensis, *Linn., Syst. Nat.* i. 2. 565 (1767).
Anobium frumentarium, *Fab., Mant. Ins.* i. 39 (1787).
Dermestes 6-dentatus, *Fab., Ent. Syst.* i. 232 (1792).
Silvanus Surinamensis, *Steph., Ill. Brit. Ent.* iii. 104 (1830).
—— ——, *Woll., Ins. Mad.* 167 (1854).

Inhabits the storehouses and granaries of Madeira proper,—evidently imported.

158. Silvanus dentatus**.

Corticaria dentata, *Mshm, Ent. Brit.* i. 108 (1802).
Silvanus dentatus, *Steph., Ill. Brit. Ent.* iii. 104 (1830).
—— intermedius, *Smith, Cat. Ins. Brit. Mus.* (Cucujidæ) 16 (1851).
—— dentatus, *Woll., Ins. Mad.* 167 (1854).

Inhabits the same places as the last species,—being, also, introduced.

159. Silvanus advena*.

Cryptophagus ferrugineus, *Sturm, Cat.* 127 (1826).
—— advena (*Kunze*), *Waltl, in Silb. Rev. Ent.* ii. 256 (1834).
Silvanus advena, *Erich., Nat. der Ins. Deutsch.* iii. 339 (1848).
—— ——, *Woll., Ins. Mad.* 168 (1854).

Inhabits the houses and granaries of Madeira proper,—introduced.

Fam. 14. CRYPTOPHAGIDÆ.

Genus 60. CRYPTOPHAGUS.

Herbst, *Käf.* iv. 172 [script. *Kryptophagus*] (1792).

160. Cryptophagus saginatus**.

C. subovalis leviter convexus latiusculus ferrugineus pube brevi depressâ dense vestitus, prothorace amplo, basin versus vix angustato, angulis posticis subrectis, ad latera bidentato, dente posteriore mox ante medium sito.
Long. corp. lin. $1\frac{1}{3}$.

Cryptophagus saginatus (*Schüpp.*) *Sturm, Deutsch. Fna,* xvi. 88. tab. 315. f. D (1845).
—— ——, *Erich., Nat. der Ins. Deutsch.* iii. 354 (1848).

C. suboval, somewhat convex and rather broad, reddish-ferruginous,

and densely clothed with a short, fine, depressed pubescence. *Head* and *prothorax* more deeply, and not quite so closely, punctured as in the other species here described: the *latter* rather large and wide, scarcely more narrowed behind than in front, and with its sides almost equally (though but slightly) rounded; with the front plait not much developed; and the lateral denticle small, and situated before the middle. *Elytra* finely punctulated, and with the sides a trifle more rounded than in the other Madeiran species (except the *Nitiduloides*). *Legs* concolorous with the rest of the surface: *antennæ* a shade darker.

The two specimens from which the above diagnosis has been compiled were captured by Mr. Bewicke near Funchal. They appear to agree with the European *C. saginatus*, except that they are a trifle darker than the ordinary English examples of that species, and that their head and prothorax are rather more coarsely punctured. The individual in the British Museum was presented by Mr. Bewicke.

161. **Cryptophagus cellaris****.

C. oblongus fusco-ferrugineus pube longiore subdepressâ dense vestitus, prothorace transverso basin versus angustato subrecto, angulis posticis acutiusculis, ad latera bidentato, dente anteriore prominulo, elytris seriatim pilosis.
Long. corp. lin. 1–1$\frac{1}{3}$.

Dermestes cellaris, *Scopoli, Ent. Carn.* 16 (1763).
Kryptophagus crenatus, *Hbst, Käf.* iv. 177. tab. 42. f. 14 (1792).
Cryptophagus ——, *Sturm, Deutsch. Fna,* xvi. 70. tab. 313. f. D (1845).
—— cellaris, *Erich., Nat. der Ins. Deutsch.* iii. 361 (1848).

C. oblong, brownish-ferruginous, and densely clothed with a long, subdepressed, griseous pubescence. *Head* and *prothorax* distinctly and closely punctured (the punctures, however, not being quite so deep as in either of the two following species): the *latter* rather short and transverse, narrowed behind, and with each of its sides nearly straight (though oblique) between the lateral denticle and the posterior angle,—which is, itself, rather acute; the projection (or shoulder-like plait) at the anterior angles more prominent and largely developed than in either the *C. dentatus* or *affinis*,—the space between it and the central tooth (which is very small, and nearly straight, or spine-shaped) being both longer and more scooped-out than in either of those insects. *Elytra* with the pubescence denser than on the prothorax (giving them, from its colour, a rather paler appearance), and disposed in pretty evident longitudinal rows. *Limbs* brownish-ferruginous, the *antennæ*, however, being somewhat darker than the legs.

The common European *C. cellaris* (which may be readily known from the other *Cryptophagi* here described by the prominence of its front prothoracic tooth, or ridge, and the greater length of the space

between that projection and the central denticle,—as well as by the coarseness of the griseous pubescence with which it is clothed, and which has a tendency on the elytra to be arranged in longitudinal rows) is probably an introduced insect into Madeira, occurring principally in the houses and granaries around Funchal. The Madeiran specimens, however, are generally of a paler, or more ferruginous, hue than the ordinary ones of more northern latitudes; nevertheless they are usually of a slightly duller, or browner, tint than either the *C. dentatus* or *affinis*.

162. Cryptophagus dentatus*.

C. parallelo-oblongus subcylindricus ferrugineus pube breviore subdepressâ parcius vestitus, prothorace basin versus leviter angustato subrecto, angulis posticis acutiusculis, ad latera bidentato, dente posteriore mox ante medium sito.

Variat colore pallido-testaceo.

Long. corp. lin. $\frac{3}{4}$–$1\frac{1}{3}$.

Kateretes dentatus, *Hbst, Käf.* v. 15. tab. 45. f. 6 (1793).
Cryptophagus dentatus et pallidus, *Sturm, Deutsch. Fna,* xvi. 67. 69. tab. 313. ff. B. C. (1845).
—— ——, *Erich., Nat. der Ins. Deutsch.* iii. 364 (1848).
—— ——, *Redt., Fna Austr.* 193 (1849).

C. parallel-oblong and somewhat cylindric (being rather more straightened in its outline than the last species), ferruginous (occasionally, especially when immature, pale testaceous), and rather sparingly clothed with a short, fine, subdepressed pubescence. *Head* and *prothorax* deeply and closely punctured: the *latter* almost as in the *C. cellaris*, except that the front tooth (or plait) is not quite so much developed or porrected, and that the space (or excavation) between it and the central denticle (which is somewhat larger in the *C. dentatus*, and more recurved, or hook-shaped) is shorter,—a structure which causes the latter, in the present insect, to be situated rather *before* the middle. *Elytra* with their sides a little more parallel than in the last species, being a trifle more rectangular about the shoulders. *Legs* concolorous with the rest of the surface: *antennæ* a shade darker.

In the *Insecta Maderensia* I had overlooked the present *Cryptophagus*, having mixed up my specimens of it with those of the following one; and it was not until its characters were clearly pointed out to me by Mr. Waterhouse, that I became convinced that it was distinct from that insect. When once perceived, however, its diagnostic features (as enunciated above) are exceedingly well marked; and there is no fear of confounding it, although variable in size and hue, with either of its allies,—the *C. cellaris* and *affinis*. It has also more right, I think, to be regarded as indigenous in Madeira (or,

at any rate, of long standing) than those species, since it has established itself in positions of a comparatively high elevation, and remote from the inhabited districts. Thus, though found likewise in Funchal, I have taken it at the Ribeiro Frio, at the Feijãa de Córte, and towards the upper extremity of the Ribeiro de S^{ta} Luzia; nevertheless as the *Cryptophagi* are very active on the wing, it is possible, after all, that its attachment to those regions may not date beyond a recent period.

163. Cryptophagus affinis**.

C. oblongo-ovalis convexus ferrugineus pube longiore dense vestitus, capite prothoraceque paulo obscurioribus, hoc basin versus vix angustato subrotundato, angulis posticis obtusiusculis, ad latera bidentato.

Long. corp. lin. $\frac{3}{4}$–1.

Cryptophagus affinis, *Sturm, Deutsch. Fna*, xvi. 79. tab. 314. f. C (1845).
—— ——, *Erich., Nat. der Ins. Deutsch.* iii. 360 (1848).
—— ——, *Redt., Fna Austr.* 192 (1849).
—— ——, *Woll., Ins. Mad.* 170 (1854).

C. oblong-ovate, being shorter (and somewhat more convex) than either of the foregoing species, ferruginous, and densely clothed with a rather long and coarse pubescence. *Head* and *prothorax* very deeply and closely punctured, and of a slightly darker (or more reddish-brown) hue than the rest of the surface: the *latter* a trifle shorter perhaps than in the last species, and much more distinctly rounded at its sides, the space between the lateral denticle (the position of which is about *central*) and the posterior angle being slightly curved outwards, instead of (as in that insect) nearly straight,—the angle itself being obtuse (instead of acute). *Legs* testaceous: *antennæ* brownish-ferruginous.

The somewhat smaller size, shorter outline, and more pubescent surface of the present *Cryptophagus*, in conjunction with the rounder edges, and obtuser hind-angles, of its prothorax (the space between the latter of which and the central denticle is shorter and more curved than in that insect), will at once serve, apart from minor differences, to separate it from the *C. dentatus*. It is rather common in houses and gardens around Funchal, and the other towns of Madeira proper; and although it has been already recorded in the *Insecta Maderensia*, yet since the description there given was compiled from the present species and the preceding one (which I had failed, until lately, to distinguish from it), I have added the above diagnosis, drawn out from a fresh examination of my entire series of specimens.

164. Cryptophagus Nitiduloides.

Cryptophagus Nitiduloides, *Woll., Ins. Mad.* (*Append.*) 618 (1854).

Inhabits the damp sylvan districts of Madeira proper, towards the centre and north of the island. Exceedingly rare.

Genus 61. PARAMECOSOMA.

Curtis, *in Ent. Mag.* i. 186 (1833).

Corpus parvum, *Cryptophago* simillimum; *alis* amplissimis. *Antennæ* 11-artæ, clavatæ, artis 1mo et 2do (illo præcipue) robustis, 3o paulo longiore, 4to ad 8vum latitudine paulatim vix crescentibus, reliquis clavam laxam 3-articulatam efficientibus (ultimo ad apicem oblique truncato). *Labrum* transverso-quadratum, antice integrum ciliatum. *Mandibulæ* validæ triangulares, ad apicem subito inflexæ acutæ (intus ad apicem in sp. Europæis crenulatæ, sed in Maderensi integræ), mox infra apicem (præsertim in specie Maderensi) subito et valde excisæ et membranâ ciliatâ instructæ; extus ad basin in nostrâ (sed haud in Europæis) profunde incisæ. *Maxillæ* bilobæ: *lobis* apice dense pubescentibus, sed interno in sp. nostrâ vix uncinato. *Palpi* breves: *maxillares* arto 1mo angusto flexuoso, 2do et 3o crassioribus brevibus subæqualibus, ultimo magno ovato: *labiales* arto 1mo flexuoso, 2do crassiore breviore, ultimo maximo rotundato-ovato. *Mentum* amplum, antice angustatum, summo apice (in sp. Maderensi) leviter (sed in Europæis profunde) bi-emarginato. *Ligula* subquadrata, apice (in nostrâ) integra. *Pedes* minus robusti: *tibiis* (in typicis rectis, usque ad apicem paulatim vix latioribus, sed in Maderensi) subcurvatis, paulatim ultra medium latitudine crescentibus, dein ad apicem ipsum decrescentibus: *tarsis* subtus valde pilosis, in utroque sexu 5-artis, arto 4to minutissimo, ultimo elongato *unguiculis* simplicibus munito.

Although the details of the present genus have been fully described and figured, both by Curtis and in Sturm's *Deutschlands Fauna*, I have nevertheless dissected the Madeiran representative of it and given them afresh, because in its outward aspect it recedes so much from one or two of the European species that it might perhaps be imagined, at first sight, to belong to a different group. It will be perceived, however, on reference to the above diagnosis, that all its essential characteristics are precisely those of *Paramecosoma*,—the few slight points in which it recedes from it, such as the deep cleft at the outer base of its (internally uncrenulated) mandibles, the more shallow double emargination of its mentum, and its apically-attenuated tibiæ, being of minor importance, and such as may be fairly allowed for mere specific modifications. In all its other minutiæ, it agrees with its more northern allies. It may be at once known from

Cryptophagus by the tarsi of *both* of its sexes being pentamerous, and by the excessive minuteness of their penultimate joint.

165. **Paramecosoma simplex,** n. sp.

P. oblongum pallido-ferrugineum punctatum, pube subdepressâ dense vestitum, capite prothoraceque vix obscurioribus, hoc transverso-quadrato, ad latera æqualiter rotundato et (oculis inarmatis) integro.
Long. corp. lin. 1–1$\frac{1}{8}$.

P. oblong, pale-ferruginous, and densely clothed with a fine and subdepressed pubescence. *Head* and *prothorax* generally a tinge darker (or more ferruginous), and a little more deeply punctured, than the elytra: the *latter* transverse-quadrate, and almost as broad as the elytra, being very slightly (and about equally) narrowed before and behind,—and with the sides, consequently, equally, though slightly, rounded; the edges, to an ordinary lens, entire (being free from the teeth and projections observable in the *Cryptophagi*), but when viewed under the microscope appearing minutely and obsoletely crenulated. *Antennæ* concolorous with the head and prothorax: *legs* paler.

This insect, which, from its outward contour and pallid hue, might be mistaken for a *Cryptophagus* (but which may be at once distinguished by the *generic* peculiarities mentioned above), has the edges of its prothorax more *simple* than any *Paramecosoma* with which I am acquainted; and it is only when viewed beneath the microscope that they are found to have any inequalities at all,—being then observed to be obsoletely crenulated along their entire length. The species was detected by myself, in Mr. Phelps's garden, in Funchal, during the summer of 1855, where it was abundant,—especially, however, on the wing, and just after sunset.

Genus 62. **HYPOCOPRUS.**

Motschulsky, *Bull. de la Soc. Imp. de Moscou*, 72. tab. 5. f. *d*–D‴ (1839).

166. **Hypocoprus Motschulskii.**

Hypocoprus Motschulskii, *Woll., Ins. Mad.* 174 (1854).

Inhabits Porto Santo, where it was detected by myself, in 1849, on the slopes of the Pico d'Anna Ferreira. Exceedingly rare.

Genus 63. **ATOMARIA.**

(Kirby) Steph., *Ill. Brit. Ent.* iii. 64 (1830).

The present genus has in reality an exponent in the *Insecta Made-*

rensia; nevertheless the single one included therein is of so curiously globose a form, that I did not recognize it, whilst compiling that volume, to be an *Atomaria*; and consequently described it (under the specific title of *alternans*) as an *Ephistemus*. I expressly stated, however, that it did not accord with the normal *Ephistemi*; and I therefore constituted it into a distinct Section, bearing the subgeneric name of *Microum*, and characterized by the exact peculiarities of structure which distinguish the *Atomariæ* from the members of that small and closely allied group. Having had occasion lately, however, to revise our British *Atomariæ* on a somewhat extensive scale, I at once perceived that what I had regarded as an aberrant (Madeiran) *Ephistemus* was in reality an *Atomaria*; whilst the discovery of three additional species, during my last researches in those islands, has caused the genus to be well represented in our fauna. It will consequently be sufficient here to state, that the *Atomariæ* may be known from the *Ephistemi* by their larger bulk and less globose bodies, by the greater length of their limbs, by their mandibles having a minute tooth immediately within their apex, and by the funiculus of their antennæ having the joints (though not always very distinctly so) alternately long and short. The terminal joint of their labial palpi, moreover, is not so narrow, or aciculated, as in that group.

§ I. *Corpus alatum: prothorax postice marginatus, margine in mediâ leviter elevato.*

167. Atomaria munda*.

A. oblonga picea pubescens nitida punctata, capite prothoraceque rufescentibus, hoc foveâ mediâ profundâ (utrinque costatâ) ad basin transversim impresso, elytris ad apicem dilutioribus, antennis robustis rufo-ferrugineis, pedibus rufo-testaceis.

Long. corp. lin. $\frac{4}{5}$.

Atomaria munda, *Erich., Nat. der Ins. Deutsch.* iii. 388 (1848).
—— ——, *Redt., Fna Austr.* 195 (1849).
—— ——, *Woll., Rev. Brit. Atom., Trans. Ent. Soc. Lond.* iv. (New Series) 64 (1857).

A. oblong, piceous or rufo-piceous, pubescent, shining, and punctured. *Head* and *prothorax* much more rufous than the elytra: the *latter* widest about the middle, and with the sides rather straightened towards the posterior angles; distinctly margined along its lateral, and obscurely so along its hinder edge, and with a very deep, transverse, central impression at its base,—the margin being slightly raised behind it, and the impression abruptly terminated at either end by a short costa or ridge. *Elytra* more or less diluted in colouring towards their apex. *Antennæ* robust, and rufo-ferruginous. *Legs* rufo-testaceous.

The *A. munda*, so well distinguished by the rufescent hue of its head and prothorax, the latter of which has a deep, central, transverse impression at its base (the impression being terminated at either extremity by a short raised costa, or ridge), was detected by myself in Madeira proper, during June 1855, in the Circo at S. Antonio da Serra. The Madeiran specimens would appear to be a little more deeply punctured than the ordinary European ones.

168. **Atomaria apicalis***.

A. ovata subconvexa fusco-picea valde pubescens nitida profunde punctata, elytris ad apicem necnon ad humeros dilutioribus, antennis brevibus robustis ferrugineis, pedibus testaceis.
Long. corp. lin. $\frac{3}{4}$.

Atomaria apicalis, *Erich., Nat. der Ins. Deutsch.* iii. 395 (1848).
—— ——, *Woll., Rev. Brit. Atom., Trans. Ent. Soc. Lond.* iv. (New Series) 78 (1857).

A. ovate, being widest about the middle, and a good deal acuminated both before and behind (especially the latter), more convex than the last species, brownish-piceous, coarsely pubescent, shining, and very deeply punctured. *Prothorax* widest about the middle, and with the sides almost equally (though slightly) rounded; delicately margined along its lateral edges, and more distinctly so along its hinder one (which is a little sinuated, and slightly raised in the centre) than is the case in the *A. munda*. *Elytra* more or less diluted in colouring towards their apex, and obscurely so at either shoulder. *Antennæ* short, robust, and ferruginous. *Legs* testaceous.

A single specimen of the common European *A. apicalis* (which however is a little more deeply punctured in Madeira, and somewhat less acuminated both before and behind, than in more northern latitudes, and has also its antennæ a trifle shorter, and its prothorax just perceptibly more rounded at the sides) was captured, by myself, about halfway up the Boa Ventura, in the north of Madeira proper, during August 1855.

§ II. *Corpus apterum: prothorax postice fere immarginatus.*
(Species valde indigenæ.)

169. **Atomaria insecta**, n. sp.

A. oblongo-ovata convexa rufo-picea subpubescens nitidissima leviter punctata, prothorace amplo convexo, elytris ad basin plus minus rufo-castaneis, ad apicem vix dilutioribus, antennis pedibusque longis gracilibus, illis fusco-nigris basi rufo-ferrugineis, his rufo-testaceis, femoribus tibiisque infuscatis.
Variat (immaturus) colore omnino dilutiore.
Long. corp. lin. $\frac{2}{3}$—$\frac{3}{4}$.

A. oblong-ovate, convex, rufo-piceous, very sparingly pubescent, exceedingly shining, punctured,—the punctures on the elytra, however, being very much smaller and more distant than those on the rest of the surface. *Prothorax* large and convex, being widest about the middle and with the sides almost equally (though slightly) rounded; very delicately margined along its lateral edges, but almost immarginate along its hinder one (which however is rather distinctly sinuated). *Elytra* convex (the line of separation between it and the prothorax being more depressed than in the *A. alternans*), more or less brightly reddish-castaneous towards their base, but not much diluted in colouring towards their apex. *Limbs* long and slender,—the *antennæ* being brownish-black with their base rufo-ferruginous, and the *legs* rufo-testaceous, though with their *femora* and *tibiæ* a good deal infuscated.

The present *Atomaria* (which when immature is altogether of a paler, or more rufescent, tint) is allied to the following one,—from which however it may be immediately recognized, not only by its more oblong, narrower and less globose body, and by its more quadrate prothorax (which is less dilated behind, and more dilated in front, than in that species), but likewise by its more highly polished and distinctly punctured surface, on which there are no indications (beneath the microscope) of the minutely and densely *subgranulose* structure which forms so marked a feature in the *A. alternans*. Its paler portions, moreover, are less brightly castaneous than those of that insect, and its legs are more infuscated in hue. It is a truly indigenous species, belonging to the same type (and that, moreover, from the great length of their limbs, apterous bodies, and singularity of colouring, a somewhat peculiar one) as the *A. alternans*,—with which indeed, although very much rarer, it is found in company. It was detected by myself, beneath fallen leaves, in the north of Madeira proper (in the dense forest region of the Lombo de Vaca), during August 1855.

170. Atomaria alternans.

A. globoso-ovata valde convexa nigra subglabra subnitida minutissime et creberrime granulata necnon lævissime punctata, prothorace postice lato, capite elytrisque ad basin læte rufo-castaneis, ad apicem fere concoloribus, antennis pedibusque longis gracilibus, illis nigris basi rufo-ferrugineis, his rufo-testaceis.

Var. β. omnino rufo-castanea, elytrorum fasciâ mediâ transversâ antennarumque apicibus solum nigris.

Long. corp. lin. $\frac{2}{3}$–$\frac{7}{8}$.

Ephistemus alternans, *Woll., Ins. Mad.* 177 (1854).

Inhabits the moist sylvan districts of Madeira proper,—occurring beneath fallen leaves, and vegetable refuse, at rather high and inter-

mediate altitudes. Having already described this species in the *Insecta Maderensia*, I have not thought it necessary to supply, here, more than the above corrected *diagnosis*,—which will serve to distinguish it from its newly discovered allies more satisfactorily than the one there given.

Genus 64. **EPHISTEMUS.**

(Westwood) Steph., *Ill. Brit. Ent.* ii. 167 (1829).

171. Ephistemus gyrinoides.

Dermestes gyrinoides, *Mshm, Ent. Brit.* i. 77 (1802).
Ephistemus gyrinoides, *Steph., Ill. Brit. Ent.* 168 (1829).
Epistemus ovulum ?, *Erich., Nat. der Ins. Deutsch.* iii. 402 (1848).

Var. (elytris apicem versus rufescentioribus).
Dermestes piceorrhœus, *Mshm, Ent. Brit.* i. 78 (1802).
Phalacrus dimidiatus, *Sturm, Deutsch. Fna*, ii. 85. t. 32. f. D (1807).
Ephistemus confinis, *Steph., Ill. Brit. Ent.* ii. 169. pl. xv. f. 2 (1829).
Epistemus dimidiatus, *Sturm, Deutsch. Fna*, xviii. 83. t. 343. f. A (1846).
—— ——, *Erich., Nat. der Ins. Deutsch.* iii. 401 (1848).

Inhabits Madeira proper, principally within the sylvan districts. It will be perceived that I have adopted, in this Catalogue, the title of *gyrinoides*, Mshm, instead of *dimidiatus*, Sturm, for the present *Ephistemus*, under the latter of which names I had recorded it in the *Insecta Maderensia*. I have felt compelled to do this, in deference to the right of priority, because there is no doubt whatsoever that the Madeiran insect is identical with that which has been universally known in this country as the *Dermestes gyrinoides* of Marsham, for upwards of half a century, and which was also sufficiently well characterized by Mr. Stephens, from the original Marshamian type (still extant in his collection), in 1829. It is extremely variable, as regards hue, its *tendency* being to become more or less rufescent towards its apex; and when thus brightly coloured (the aberrant state in Madeira, as well as in England,—and I believe, also, throughout Europe generally) it is the *E. dimidiatus* of the continental cabinets.

Fam. 15. LATHRIDIADÆ.

Genus 65. **CHOLOVOCERA.**

Motschulsky, *Bull. de Moscou*, 177 (1838).

172. Cholovocera Maderæ.

Coccinella succina, *Heinecken, in litt.*
Cholovocera Maderæ (*Westw.*), *Woll., Ins. Mad.* 180. tab. x. f. 1 (1854).

Inhabits Madeira proper (probably in ants' nests); extremely rare. It is hitherto unique, the single specimen (which was collected by Dr. Heinecken) being in the British Museum.

Genus 66. HOLOPARAMECUS.

Curtis, *Ent. Mag.* i. 186 (1833).

173. Holoparamecus niger.

Calyptobium nigrum, *Chevrier, in litt.*
—— ——, *Aubé, Ann. de la Soc. Ent. de France* (2ième série), i. 246 (1843).
Holoparamecus niger, *Woll., Ins. Mad.* 182 (1854).

Inhabits Madeira and Porto Santo, occurring beneath stones and scoriæ, in sunny spots of a low elevation.

Genus 67. CORTICARIA.

Marsham, *Ent. Brit.* i. 106 (1802).

174. Corticaria rotulicollis.

Corticaria rotulicollis, *Woll., Ins. Mad.* 184 (1854).

Inhabits Madeira proper, at low and intermediate altitudes. Rare.

175. Corticaria crenicollis*.

Corticaria crenicollis, *Mann., in Germ. Zeit. für die Ent.* v. 37 (1844).
—— ——†, *Woll., Ins. Mad.* 185 (1854).

Inhabits Madeira proper, occurring in houses, &c., around Funchal. Perhaps introduced.

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† The distinctions between the *C. crenicollis*, as defined in the *Insecta Maderensia*, and the *C. fulva* are not sufficiently well expressed in that volume,—for being both of the same pale-ferruginous hue and pubescent surface, and being moreover usually found in company, they are not at first sight easily separable. It is only indeed with the aid of the microscope that the differences can be fully appreciated; but when viewed under a tolerably high power, the head and prothorax of the *C. crenicollis* will be at once perceived to be almost *unpunctured*, though coarsely granulose, whilst those of the *fulva* are beset with punctures both large and deep. The prothorax of the *crenicollis*, moreover, is not quite so rounded, or so crenulated, at its sides as that of the *fulva*; its forehead is slightly wider, with the eyes not quite so prominent; its antennæ are just perceptibly longer and paler; and its elytra are perhaps a little more shining. Whether it be the true *crenicollis* of Mannerheim, or merely the male sex of the *C. fulva*, I will not undertake to decide for certain.

176. **Corticaria fulva****.

Latridius fulvus (*Chevr.*), *Villa, Cat. Col. Eur.* 45 (1835).
Corticaria fulva, *Mann., in Germ. Zeit. für die Ent.* v. 42 (1844).
—— ——, *Redt., Fna Austr.* 209 (1849).
—— ——, *Woll., Ins. Mad.* 185 (1854).

Inhabits Madeira proper, generally in company with the last, and (like it) probably introduced.

177. **Corticaria rotundicollis.**

Corticaria rotundicollis, *Woll., Ins. Mad.* 186 (1854).

Inhabits Madeira proper, being confined to the damp sylvan districts of a rather high elevation.

178. **Corticaria curta.**

Corticaria curta, *Woll., Ins. Mad.* 187 (1854).

Inhabits all the islands of the Madeiran Group, except the Northern Dezerta (on which it has not yet been detected), abounding at intermediate altitudes.

179. **Corticaria Fagi.**

Corticaria Fagi, *Woll., Ins. Mad.* 188 (1854).

Inhabits Madeira proper, occurring in the sylvan districts of intermediate elevations, and being more particularly attached to the Spanish-chestnut trees.

Genus 68. **LATHRIDIUS.**

Herbst, *Natursyst.* v. 8 [script. *Latridius*] (1793).

180. **Lathridius assimilis***.

Lathridius assimilis, *Mann., in Germ. Zeit. für die Ent.* v. 98 (1844).
—— ——, *Woll., Ins. Mad.* 189 (1854).
—— collaris, *Motschulsky, in litt.*

Inhabits Madeira proper, principally within the inhabited districts.

181. **Lathridius minutus***.

Tenebrio minutus, *Linn., Syst. Nat.* ii. 675 (1767).
Latridius porcatus, *Steph., Ill. Brit. Ent.* iii. 113 (1830).
Lathridius minutus, *Mann., in Germ. Zeit. für die Ent.* v. 96 (1844).
—— ——, *Woll., Ins. Mad.* 190 (1854).

Inhabits Madeira proper, abounding everywhere.

182. **Lathridius transversus***.

Ips transversa, *Oliv., Ent.* ii. 18. 20. pl. 3. f. 20 *a, b* (1790).
Corticaria transversa, *Mshm, Ent. Brit.* i. 109 (1802).
Lathridius transversus, *Mann., in Germ. Zeit. für die Ent.* v. 94 (1844).

Inhabits Madeira proper, principally within the cultivated districts.

183. **Lathridius ruficollis***.

L. elongatus angustus, capite prothoraceque rufescentibus subpunctato-rugosis, hoc angustiore subconvexo, nec ad latera nec ad angulos anticos ampliato, ad basin transversim constricto, elytris profunde seriatim punctatis (punctis maximis sed in seriebus plus minus irregularibus dispositis), suturâ interstitiisque leviter elevatis.
Long. corp. lin. vix $\frac{2}{3}$.

Corticaria ruficollis, *Mshm, Ent. Brit.* i. 111 (1802).
Latridius ruficollis, *Steph., Ill. Brit. Ent.* iii. 114 (1830).
—— liliputanus, *Villa, Cat.* 36 (1833).
Lathridius ——, *Mann., in Germ. Zeit. für die Ent.* v. 85 (1844).

L. small, elongate, and narrow. Head and prothorax rufescent, and rugosely punctured and wrinkled: the *former* unchanneled: the *latter* narrow (especially behind), and rather convex, not being flattened at the sides; with a straightened transverse constriction posteriorly, between which and the anterior angles (which are not outwardly flattened, or developed) it is rounded. *Elytra* with the sides rather parallel about the middle, and, although rounded at the shoulders, with the humeral angle itself (or ridge) somewhat porrected and acute; deeply seriate-punctate, the punctures being very large, but somewhat unevenly disposed,—causing the interstices (which, with the suture, are slightly elevated) to be more or less irregular (or waved), especially towards the base, and the surface consequently to present a rather rugulose, or reticulated, appearance. *Limbs* pale rufo-ferruginous.

An insect pretty generally distributed throughout Europe, and detected during the autumn of 1855, by Mr. Bewicke and myself, in the south of Madeira proper,—where it was tolerably abundant beneath the dead bark of some old palings, surrounding a hay-stack, on the hills immediately above Camacha: and some specimens have been recently communicated to me by Mr. Mason, taken from amongst the dried plants which he had collected in the island. It is the undoubted *Corticaria ruficollis* of Marsham, an insect which was erroneously referred by Mannerheim to the *Latridius constrictus* of Gyllenhal.

Genus 69. **METOPHTHALMUS.**

Wollaston, *Ins. Mad.* 192. tab. iv. f. 4 (1854).

184. **Metophthalmus asperatus.**

Metophthalmus asperatus, *Woll., Ins. Mad.* 193. tab. iv. f. 4 (1854).

Inhabits the damp sylvan districts of Madeira proper, occurring beneath bark and in dry rotten wood at intermediate elevations. Up to the publication of the *Insecta Maderensia* it was unique, but on the 22nd of August 1855 I detected it in abundance amongst the dead, tinder-like wood of an old Til-tree at the Ribeiro Frio, where it was apparently feeding upon a minute Mould, or *Thallus* (the *Rhinotrichum Bloxhami*, Berk.), with the particles of which it was (especially on its under-side) more or less densely powdered. I am also informed by Mr. Bewicke that he has captured it at the Mount, above Funchal.

Genus 70. **MONOTOMA.**

Herbst, *Natursyst.* v. (1793).

This genus (so universal throughout Europe) is an addition to our fauna since the publication of the *Insecta Maderensia*, the two following species having been detected by myself during my last sojourn in these islands, in 1855. It may be readily known by the robust limbs, and long, narrow and laterally crenulated prothoraces, and the posteriorly truncated elytra of the (small and rather acuminated) insects which unite in composing it,—the antennæ of which are only 10-articulate (the terminal joint being apparently absorbed within the apex of their *one-jointed* club), and the tarsi tetramerous. Regarding their affinities, the *Monotomæ* would seem to be connective between the present family and the *Colydiadæ*,—agreeing with the former in their minute size and general contour, as well as in the obsoleteness of their inner maxillary lobe, and the largely developed penultimate articulation of their palpi; but with the latter in the robustness of their limbs, and in the number of their antennal and tarsal joints: and, although I have not thought it necessary, in this Catalogue, to deviate from the usual plan, of assigning them to the *Lathridiadæ*, I cannot but record my conviction that they have really a closer relation (both in structure and habits) with the *Colydiadæ* than with the members of our present group.

185. **Monotoma spinifera,** n. sp.

M. nigro-picea subnitida, oculis ante basin capitis sitis, capite prothoraceque profundius rugose punctatis, hoc ad latera subrotundato, angulis anticis in spinam magnam exstantem productis, elytris (præsertim ad humeros) picescentioribus, profunde seriatim

punctatis, antennis pedibusque pallidioribus longioribus valde robustis.
Long. corp. lin. $1\frac{1}{3}$.

M. dark-piceous, and slightly shining (at any rate on the elytra). *Head* and *prothorax* very deeply and roughly punctured: the *former* with the *eyes* situated at some little distance before the extreme base,—the basal rim itself being broader and more regularly rounded (and therefore less angular) than in the following species: the *latter* narrowed anteriorly, but slightly rounded at the sides,—the broadest part being a little behind the middle; with the edges crenulated, and the anterior angles produced into a very large, blunt and outwardly-directed spiniform tooth; with a broad shallow fovea on either side behind, and occasionally with a channel on the fore-disk which vanishes about the middle. *Elytra* more piceous, or diluted in colouring, than the rest of the surface,—especially about the shoulders, where it is at times rufo-ferruginous; deeply and rugosely seriate-punctate, and with longitudinal rows of short, decumbent rigid setæ, or pubescence. *Limbs* longer and more robust than in the next species; and clear rufo-ferruginous,—the *antennæ* however, especially towards their apex, being obscurer.

A single specimen of the present *Monotoma* (on the distinctive characters of which I have received some interesting observations from Mr. Janson) was detected by myself in the Ribiero de São Jorge (in the north of Madeira proper) during the summer of 1855; and a second one has been lately communicated to me by Mr. Mason.

186. **Monotoma congener**, n. sp.

M. picea subopaca, oculis fere ad basin capitis sitis, capite prothoraceque rugose punctatis, hoc ad latera subrecto, angulis anticis in spinam productis, elytris (præsertim ad humeros) fuscescentioribus, seriatim punctatis, antennis pedibusque pallidioribus robustis.
Long. corp. lin. 1–$1\frac{1}{3}$.

M. smaller and more opake than the preceding species, and generally of a slightly browner, or more diluted, hue. *Head* and *prothorax* less deeply sculptured: the *former* with the *eyes* rather more prominent, and nearer to the base, than in that insect, and with the hinder rim itself consequently narrower and less rounded,—the head being more suddenly truncated (much as in the common European *M. picipes*): the *latter* with the sides much straighter than in the preceding insect, and with the anterior angles produced into a less-developed, and a not quite so outwardly-directed, spine; and with the basal foveæ and lateral crenulations not quite so distinct. *Elytra* usually altogether browner, and more diluted in colouring, than the last species; also less deeply sculptured, with the pubescence somewhat finer, and with their sides a trifle more parallel.

Limbs a little shorter and less robust than those of the *M. spinifera*.

A species which would appear to be the Madeiran representative of the common European *M. picipes*. Its prothorax however is more quadrate, or straighter at the sides, than in that insect (being a little wider in front, and rather less rounded behind), and the spine at the anterior angle is both less developed and *less outwardly-directed*. Its elytra, also, are perhaps just perceptibly less ovate, and its antennæ a trifle shorter (?) and more robust. *Both* of the *Monotomæ* here described, moreover, have their shoulders somewhat more porrected, or (which amounts to the same thing) the base of their elytra more scooped-out, than in the *M. picipes*; and it is just possible (as indeed Mr. Janson has suggested to me) that they may be but the sexes of a single species. Nevertheless, since they differ so materially *inter se*, it is of course impossible, in the absence of any evidence to that effect, to regard them as such. Four examples only of the *M. congener* (all captured in Madeira proper) have hitherto come beneath my notice: two of them were taken by myself, during the summer of 1855,—one in the north of the island, in the Ribeiro de São Jorge; and the other (which is now in the British Museum) on the Eschada of Camacha, in the south;—the third was found by Mr. Bewicke, at the Mount, above Funchal; and the fourth by Mr. Mason, in the Boa Ventura.

Fam. 16. MYCETOPHAGIDÆ.

Genus 71. BERGINUS.

(Dejean) Erichson, *Nat. der Ins. Deutsch.* iii. 405 (1848).

187. Berginus Tamarisci.

Berginus Tamarisci, *Dej., in litt.*
—— ——, *Woll., Ins. Mad.* 195 (1854).

Inhabits Madeira and Porto Santo,—occurring, sparingly, at low and intermediate elevations.

Genus 72. MYCETÆA.

(Kby) Steph., *Ill. Brit. Ent.* iii. 80 (1830).

Mycetæa, the sole exponent of which hitherto detected is so universal throughout Europe, is very closely allied to *Microchondrus*; but the distinctive features of the two may be partially gathered by a reference to that genus, in the *Insecta Maderensia*. We may however briefly state, that the fully developed inner maxillary lobe of

Mycetœa, in conjunction with its rounded upper lip and the differently proportioned joints of its antennæ and palpi, the former of which are inserted at a greater distance from the (much smaller and less prominent) eyes, and have the basal articulation of their club considerably less enlarged, would seem to be sufficiently important, apart from its external characters of outline and sculpture, to render its separation from *Microchondrus* at any rate desirable.

188. **Mycetæa hirta***.

M. obovato-elliptica postice acuminata, rufo-ferruginea nitida longe pilosa, prothorace punctato, ad basin lineâ transversim impresso et intra marginem lateralem utrinque costato, elytris profunde punctato-striatis.

Long. corp. lin. $\frac{2}{3}$–$\frac{7}{8}$.

Dermestes fumatus, *Mshm* [nec *Linn.* 1767], *Ent. Brit.* i. 65 (1802).
Cryptophagus hirtus, *Gyll.* [nec *Mshm*, 1802], *Ins. Suec.* i. 184 (1808).
Mycetæa fumata, *Steph.*, *Ill. Brit. Ent.* iii. 81. pl. 17. f. 1 (1830).
—— hirta, *Redt.*, *Fna Austr.* 197 (1849).

M. obovate and somewhat elliptical,—being however more acuminated behind than in front; rufo-ferruginous, shining, and clothed with exceedingly long, suberect and very coarse pubescence. *Head* and *prothorax* distinctly, but rather remotely, punctured: the *former* with the *eyes* very small, and scarcely at all prominent: the *latter* transverse, with the edges appearing a little uneven beneath a high magnifying power, but not crenulated (as in *Microchondrus*); with an impressed transverse line at the base, and within either lateral margin a raised costa, or ridge. *Elytra* deeply punctate-striate,—the punctures being very large and deep, but the striæ shallow; widest a little behind the base, and then regularly attenuated. *Limbs* somewhat paler.

Detected by myself, in abundance, on the inner walls of the Pilgrims' House at S. Antonio da Serra (in Madeira proper), on the 11th of June 1855; and a specimen has been lately communicated to me by Mr. Bewicke, captured beneath the bark of a Spanish-chestnut tree at the Mount, above Funchal. With respect to its synonymy, we may observe, that, since Marsham misapplied a Linnæan name and Gyllenhal a Marshamian one, in their descriptions of this insect, the title of *fumatus*, Mshm (though not Linn.), would in right of priority have been adopted, instead of *hirtus*, Gyll. (though not Mshm), had not the diagnosis of the former been absolutely incorrect,—so as, in point of fact, to become no diagnosis at all. Marsham's name therefore has of necessity to be cancelled, and Gyllenhal's (which is accompanied by a full and accurate description) to be accepted instead.

Genus 73. **MICROCHONDRUS.**

(Guérin) Woll., *Ins. Mad.* 196. tab. iv. f. 2 (1854).

189. **Microchondrus domuum.**

Microchondrus domuum, *Guérin, in litt.*
—— ——, *Woll., Ins. Mad.* 197. tab. iv. f. 2 (1854).

Inhabits Madeira proper, occurring in houses and beneath the bark of trees at low and intermediate altitudes.

Genus 74. **TYPHÆA.**

(Kby) Steph., *Ill. Brit. Ent.* iii. 70 (1830).

190. **Typhæa fumata*.**

Dermestes fumatus, *Linn., Syst. Nat.* ii. 564 (1767).
Mycetophagus fumatus, *Gyll., Ins. Suec.* iii. 399 (1813).
Typhæa testacea et tomentosa, *Steph., Ill. Brit. Ent.* iii. 71 (1830).
—— fumata, *Woll., Ins. Mad.* 199 (1854).

Inhabits Madeira proper, being found sparingly within the cultivated districts.

Genus 75. **LITARGUS.**

Erichson, *Nat. der Ins. Deutsch.* iii. 415 (1848).

191. **Litargus pictus.**

Litargus pictus, *Woll., Ins. Mad.* 200. tab. iv. f. 5 (1854).

Inhabits Madeira proper; occurring in the sylvan districts of intermediate and lofty elevations, and being especially attached to a Lichen (known locally as the "Madre de Louro") peculiar to the native Laurels.

192. **Litargus pilosus,** n. sp.

L. ellipticus niger dense pubescens, prothorace brevi transverso lateribus (præsertim ad angulos posticos) dilutioribus, elytris fasciis duabus (unâ sc. basali, alterâ postmediâ) rufo-testaceis ornatis, antennis pedibusque pallidis.
Long. corp. lin. $1\frac{1}{8}$.

L. of the same form and hue as the *L. pictus*, but much smaller, more densely pubescent, very much less deeply punctured (the punctures being scarcely visible on account of the pile), and with the elytra *not* striated. *Prothorax* with its edges more narrowly, and less distinctly, pale, than in that species, nevertheless rather brightly testaceous about the posterior angles. *Elytra* with two broad zigzag fasciæ (viz., one at the base, and covering nearly the whole basal region, and the other a little behind the middle,—the latter of them being the straighter and better-defined of the two)

bright rufo-testaceous; the margin also, and extreme apex, diluted in hue. *Limbs* pale-testaceous,—being somewhat paler (and slenderer) than those of the *L. pictus*.

The present insect (which is new to our fauna) and the following one belong to precisely the same type of form,—distinguished from the European *L. bifasciatus* by (*inter alia*) their more elliptical, pilose bodies, and basally truncated prothoraces: whilst the characters which separate the *L. pilosus* from its Madeiran ally may be immediately gathered by a reference to the diagnosis given above. Of the species now under consideration two specimens only have hitherto come beneath my notice,—one of which was captured by myself, on the wing, in Mr. Phelps's garden at the Carmo, during September 1855; and the other, taken likewise near Funchal (in a bone), has been recently communicated by Mr. M. Park.

Fam. 17. DERMESTIDÆ.

Genus 76. DERMESTES.

Linnæus, *Syst. Nat.* ii. 561 (1767).

193. Dermestes vulpinus**.

Dermestes vulpinus, *Fab.*, *Spec. Ins.* i. 64 (1781).
—— ——, *Oliv.*, *Ent.* ii. 9. 8. pl. 1. f. 6 (1790).
—— ——, *Gyll.*, *Ins. Suec.* i. 147 (1808).
—— ——, *Woll.*, *Ins. Mad.* 202 (1854).

Inhabits Madeira proper, occurring in Funchal. Evidently introduced.

Genus 77. ATTAGENUS.

Latreille, *Gen. Crust. et Ins.* ii. 32 (1802).

194. Attagenus megatoma**.

Dermestes megatoma, *Fab.*, *Ent. Syst.* v. *Suppl.* 71 (1798).
—— ——, *Dufts.*, *Fna Austr.* iii. 40 (1825).
Attagenus megatoma, *Erich.*, *Nat. der Ins. Deutsch.* iii. 441 (1848).
—— ——, *Woll.*, *Ins. Mad.* 204 (1854).

Inhabits Madeira proper, occurring in similar places as the last; and, like it, manifestly introduced.

Genus 78. ANTHRENUS.

Geoffroy, *Hist. des Ins.* i. 113 (1764).

195. Anthrenus varius*.

Anthrenus Verbasci, *Oliv.* [nec *Linn.* 1767], *Ent.* ii. 14. 7. pl. 1. f. 2 (1790).
—— varius, *Fab.*, *Ent. Syst.* i. 262 (1792).
—— Verbasci, *Heer*, *Fna Col. Helv.* i. 441 (1841).
—— varius, *Erich.*, *Nat. der Ins. Deutsch.* iii. 455 (1848).
—— ——, *Woll.*, *Ins. Mad.* 205 (1854).

Inhabits Madeira and Porto Santo,—being abundant in flowers, at low elevations. It is found also in the Canary Islands.

Sectio V. CORDYLOCERATA.

Fam. 18. BYRRHIDÆ.

Genus 79. SYNCALYPTA.

(Dillwyn) Steph., *Ill. Brit. Ent.* iii. 133 (1830).

196. Syncalypta capitata.

Syncalypta capitata, *Woll.*, *Ins. Mad.* 207 (1854).

Inhabits Madeira proper, being attached to the highest elevations. Exceedingly rare.

197. Syncalypta ovuliformis.

Syncalypta ovuliformis, *Woll.*, *Ins. Mad.* 207 (1854).

Inhabits Madeira proper, descending to a much lower altitude than the preceding species,—being often found in the pine-woods at about 2000 feet above the sea. It is about the size and form of the *S. setigera*, Ill., of central and southern Europe; but its setæ are much finer and less rigid, its under-pubescence is yellower and more silken, and the striæ of its elytra are deeply and regularly punctured,—whereas in that insect the elytral striæ (although obscurely crenulated) are impunctate.

198. Syncalypta horrida.

Syncalypta horrida, *Woll.*, *Ins. Mad.* 208 (1854).

Inhabits Porto Santo and the Dezerta Grande: exceedingly rare. The very much larger and more distant prothoracic punctures of the present *Syncalypta*, in conjunction with its more deeply striated elytra, and somewhat rounder (or shorter) outline, will serve to separate it from the preceding species. Two examples only have hitherto come beneath my notice, both of which were captured by myself,—

one (which is now in the British Museum) in the former of the above-mentioned islands, and the other (more recently) on the latter. The Dezertan specimen has the punctures of its elytral striæ larger, and more distinct, than the one from Porto Santo.

Fam. 19. HISTERIDÆ.

Genus 80. HISTER.

Linnæus, *Syst. Nat.* ii. 566 (1767).

199. Hister major*.

Hister major, *Linn.*, *Syst. Nat.* ii. 566 (1767).
—— ——, *Fab.*, *Ent. Syst.* i. 72 (1792).
—— ——, *Payk.*, *Mon. Hist.* 11. tab. 2. f. 3 (1811).
—— ——, *Woll.*, *Ins. Mad.* 210 (1854).
—— ——, *De Marseul, in Ann. de la Soc. Ent. de France* (3ième série), ii. 173. pl. 6. f. 4 (1854).

Inhabits the sandy districts of Porto Santo, of a low elevation. It is recorded also in the Canarian Group.

Genus 81. PAROMALUS.

Erichson, *in Klug Jahrb.* i. 167 (1834).

200. Paromalus minimus.

Hister minimus, *Dej. Cat.* (ed. 1) (1821).
Dendrophilus punctatus, *Steph.* [nec *Ent. Hefte*], *Ill. Brit. Ent.* iii. 159 (1830).
Paromalus minimus, *Aubé, Ann. de la Soc. Ent. de France* (2ième série), viii. 322 (1850).
—— ——, *Woll.*, *Ins. Mad.* 212 (1854).
Carcinops minimus, *De Marseul, in Ann. de la Soc. Ent. de France* (3ième série), iii. 90. pl. 22. f. 3 (1855).

Inhabits Madeira proper, abounding at intermediate and lofty elevations.

201. Paromalus pumilio*.

Paromalus pumilio, *Erich.*, *in Klug Jahrb.* i. 169 (1834).
—— ——, *Woll.*, *Ins. Mad.* 213 (1854).
Carcinops pumilio, *De Marseul, in Ann. de la Soc. Ent. de France* (3ième série), iii. 91. pl. 22. f. 4 (1855).

Inhabits Madeira proper, occurring amongst *rejectamenta* on, and near, the beach at Funchal. Both the present species and the preceding one fall into the genus *Carcinops* of De Marseul,—distinguished by certain small characters of the pro- and meso-sterna, and

by the elytra being more regularly and deeply striated than is the case with the typical *Paromali*: but as these differences are of scarcely more than Sectional importance, I have not thought it necessary to refer them to a different genus from that to which they have been already assigned in the *Insecta Maderensia*.

Genus 82. **SAPRINUS.**

Erichson, *in Klug Jahrb.* i. 172 (1834).

202. **Saprinus nitidulus****.

Hister nitidulus, *Fab., Syst. Eleu.* i. 85 (1801).
—— ——, *Payk., Mon. Hist.* 58. tab. 5. f. 3 (1803).
Saprinus nitidulus, *Erich., Käf. der Mark Brand.* ii. 670 (1839).
—— ——, *Woll., Ins. Mad.* 215 (1854).
—— ——, *De Marseul, in Ann. de la Soc. Ent. de France* (3ième série), iii. 402. pl. 17. f. 40 (1855).

Inhabits Madeira proper, occurring amongst *rejectamenta* in and around Funchal. Rare.

203. **Saprinus chalcites***.

Hister chalcites, *Illig., Mag. für Ins.* vi. 40 (1807).
—— affinis, *Payk., Mon. Hist.* 76. tab. 7. f. 2 (1811).
Saprinus chalcites, *Erich., in Klug Jahrb.* i. 182 (1834).
—— ——, *Woll., Ins. Mad.* 216 (1854).
—— ——, *De Marseul, in Ann. de la Soc. Ent. de France* (3ième série), iii. 445. pl. 18. f. 71 (1855).

Inhabits Madeira, Porto Santo, and the Dezerta Grande, occurring sparingly at rather low elevations.

204. **Saprinus metallicus***.

Hister metallicus, *Hbst, Nat. Syst.* iv. 32. tab. 35. f. 7 (1791).
—— ——, *Fab., Syst. Eleu.* i. 89 (1801).
Saprinus metallicus, *Erich., in Klug Jahrb.* i. 195 (1834).
—— ——, *Woll., Ins. Mad.* 217 (1854).
—— ——, *De Marseul, in Ann. de la Soc. Ent. de France* (3ième série), iii. 722. pl. 20. f. 156 (1855).

Inhabits Porto Santo, abounding at times in sandy spots near the sea-shore.

Genus 83. **ACRITUS.**

Le Conte, *Proc. of the Acad. of Philad.* iii. 288 (1853).

It will be sufficient here to state that the little genus *Acritus*, which contains the minims of the *Histeridæ* (some of its members being less than half a line in length), was separated from the *Abræi*,

by Dr. Le Conte, mainly, through the fact of its hinder feet being tetramerous,—the first and second joints being soldered together, so as to produce an elongated basal one. The *Acriti* occur principally beneath vegetable detritus, on the damp ground; but their minute size and uniformly black hue render them somewhat difficult to detect.

205. Acritus minutus.

A. niger nitidus punctulatus, prothorace ad basin lineâ distinctâ e punctis plurimis compositâ instructo, prosterno utrinque incurvo, mesosterno antice rotundato et lineâ integrâ marginato, elytrorum striis obliquis fere obsoletis, antennis pedibusque fusco-ferrugineis. Long. corp. lin. $\frac{1}{2}$–vix $\frac{2}{3}$.

Hister minutus, *Hbst, Nat. Syst.* iv. 41. tab. 36. f. 4 (1791).
—— ——, *Gyll., Ins. Suec.* i. 99 (1808).
Abræus minutus, *Erich., in Klug Jahrb.* i. 208 (1834).
Acritus minutus, *De Marseul, in Ann. de la Soc. Ent. de France* (3ième série), iv. 614 (1857).

A. rounded-ovate, black, shining, and rather deeply punctured all over. *Prothorax* with an exceedingly distinct line of larger punctures (or confluent impressions) behind, which is arranged transversely, and arcuated in the centre: *prosternum* with the sides regularly and equally incurved, and therefore a little expanded both before and behind. *Mesosternum* slightly elevated, regularly rounded in front, and uniformly (though narrowly) margined along its entire edge; separated from the metasternum by a row of deep punctures. *Elytra* with scarcely any indications (even beneath the microscope) of oblique, interrupted striæ. *Antennæ* and *legs* fusco-ferruginous.

Two specimens of the *A. minutus* were captured by myself, beneath vegetable detritus, in a sandy lane immediately outside the Cidáde of Porto Santo, during May 1855; and a third has been lately communicated from Madeira proper, by Mr. Mason,—taken by himself at the Jardim da Serra. The Porto-Santan ones have been carefully examined by Mr. Janson, who has paid considerable attention to the *Abræi* and *Acriti*, and who regards them as truly referable to the *Hister minutus* of Herbst; and I have myself, also, closely overhauled them beneath the microscope, and can discover no appreciable difference to warrant their separation from the common English species,—unless it be that they are perhaps a trifle smaller, and with their punctures just perceptibly deeper. The Madeiran example, however, which corresponds entirely with the ordinary type, is a little larger than those from Porto Santo, and has its rudimentary elytral striæ somewhat more perceptible. In the structure of their pro- and meso-sterna, the whole three accord exactly with De Marseul's

figure and description of that insect,—which is stated by him to occur throughout Europe.

206. Acritus homœopathicus, n. sp.

A. piceo-niger subnitidus undique subtilissime alutaceus et minute punctulatus, prothorace ad basin lineâ minus distinctâ e punctulis plurimis compositâ instructo, prosterno utrinque subrecto, mesosterno antice in medio leviter rotundato sed immarginato, ad latera late et oblique truncato atque ibidem lineâ marginato, elytris sat distincte oblique striatis, antennis pedibusque fusco-ferrugineis subgracilibus.

Long. corp. lin. $\frac{1}{2}$.

A. rather smaller, and a little more piceous, than the last species, also not quite so shining (its entire surface being minutely and densely alutaceous all over), and with its punctures a good deal smaller and rather more numerous. *Prothoracæ* with its row of basal impressions less distinct: *prosternum* nearly a parallelogram, and with its sides therefore much straighter than those of the *A. minutus*. *Mesosternum* rounded and unmargined in the centre (in front), and then obliquely truncated at either side (where its edges are margined),—causing a well-defined angle to be shaped-out at its junction with the metasternum. *Elytra* somewhat longitudinally-strigulose, and with the rudiments of a few oblique interrupted striæ very evident. *Limbs* a trifle paler and slenderer than in the last species.

A single example of this well-marked little *Acritus* was detected by myself in the Ribeiro de São Jorge, in the north of Madeira proper, during August 1855. Apart from its smaller bulk, alutaceous surface, and much finer sculpture, it may be readily known from the *A. minutus* by the form of its prosternum,—which is very much straighter than in that insect (being in fact almost a parallelogram): its mesosternum, also, is rounded merely in the centre, in front (and even there but slightly), it being obliquely incurved, or truncated, at either side,—causing the angle between it and the metasternum to be exceedingly well defined. The anterior rounded portion, likewise, which is of exactly the same breadth as the base of the prosternum, is *immarginate*,—the *truncated edges* being alone thickened into an elevated line. In the structure of its mesosternum indeed it is almost identical with De Marseul's figure of the *A. nigricornis*; nevertheless it recedes from that species not only in its more parallel prosternum, but in many other particulars,—as, for instance, its densely alutaceous surface, paler antennæ, and by the rudiments of its oblique elytral striæ being exceedingly apparent. It is of about the size of an ordinary homœopathic globule, a circumstance which has suggested its specific title.

Fam. 20. THORICTIDÆ.

Genus 84. THORICTUS.

Germar, *in Silb. Rev. Ent.* ii. 2. 15 (1834).

207. Thorictus Westwoodii.

Thorictus Westwoodii, *Woll., Ins. Mad.* 220. tab. iv. f. 6 (1854).

Inhabits Madeira and Porto Santo, occurring (beneath stones) at low elevations towards the southern coasts. Exceedingly rare.

Fam. 21. APHODIADÆ.

Genus 85. APHODIUS.

Illiger, *Käfer Preuss.* i. 28 (1798).

208. Aphodius Hydrochæris*.

Scarabæus Hydrochæris, *Fab., Ent. Syst. Suppl.* 23 (1798).
Aphodius Hydrochæris, *Illig., Mag. für Ins.* ii. 193 (1803).
—— ——, *Heer, Fna Col. Helv.* i. 522 (1841).
—— ——, *Woll., Ins. Mad.* 222 (1854).

Inhabits Madeira and Porto Santo,—occurring in the dung of cattle, principally at rather low elevations.

209. Aphodius nitidulus*.

Scarabæus nitidulus, *Fab., Ent. Syst.* i. 30 (1792).
Aphodius nitidulus, *Gyll., Ins. Suec.* i. 28 (1808).
—— ——, *Heer, Fna Col. Helv.* i. 523 (1841).
—— ——, *Woll., Ins. Mad.* 223 (1854).

Inhabits Madeira and Porto Santo, abounding at all elevations.

210. Aphodius rufus*.

Aphodius rufus, *Illig., Mag. für Ins.* ii. 195 (1803).
—— ——, *Dufts., Fna Austr.* i. 127 (1805).
—— ——, *Erich., Nat. der Ins. Deutsch.* iii. 836 (1848).
—— ——, *Woll., Ins. Mad.* 224 (1854).

Inhabits Madeira proper, principally at low elevations. Locally abundant.

211. Aphodius lividus*.

Scarabæus lividus, *Oliv., Ent.* i. 3. 86 (1789).
Aphodius Anachoreta, *Fab., Syst. Eleu.* i. 74 (1801).
Scarabæus bilituratus, *Mshm, Ent. Brit.* i. 15 (1802).
Aphodius lividus, *Woll., Ins. Mad.* 225 (1854).

Inhabits Madeira and Porto Santo, occurring sparingly at low and intermediate altitudes.

212. Aphodius Pedrosi.

Aphodius Pedrosi, *Woll., Ins. Mad.* 226 (1854).

Inhabits Porto Santo, and is hitherto unique. Found in a sandy spot near the Cidáde in 1848.

213. Aphodius granarius*.

Scarabæus granarius, *Linn., Syst. Nat.* i. ii. 547 (1767).
Aphodius granarius, *Illig., Mag. für Ins.* ii. 192 (1803).
—— ——, *Heer, Fna Col. Helv.* i. 519 (1841).
—— ——, *Woll., Ins. Mad.* 226 (1854).

Inhabits Madeira and Porto Santo, being tolerably common at most elevations.

Genus 86. OXYOMUS.

(Eschscholtz) De Casteln., *Hist.* ii. 98 (1840).

214. Oxyomus Heinekeni.

Oxyomus Heinekeni [script. *Heineckeni*], *Woll., Ins. Mad.* 228 (1854).

Inhabits Madeira proper, occurring near Funchal: rare. I have not myself taken this insect; but there are two specimens in the British Museum, from the collection of the late Dr. Heineken, and two more have been recently communicated to me by Mr. Mason.

215. Oxyomus brevicollis.

Oxyomus brevicollis, *Woll., Ins. Mad.* 229 (1854).

Inhabits Madeira proper, being found sparingly in and around Funchal.

Genus 87. PSAMMODIUS.

Gyllenhal, *Ins. Suec.* i. 6 (1808).

216. Psammodius cæsus.

Scarabæus cæsus, *Panz., Fna Ins. Germ.* 35. 2 (1796).
Aphodius cæsus, *Fab., Syst. Eleu.* i. 82 (1801).
Psammodius cæsus, *Erich., Nat. der Ins. Deutsch.* iii. 913 (1848).
—— ——, *Woll., Ins. Mad.* 231 (1854).

Inhabits Madeira and Porto Santo, principally at low elevations.

217. Psammodius sabulosus.

Oxyomus sabulosus, *Dej. Cat.* (edit. 3) 163 (1837).
Platytomus sabulosus, *Muls., Lamell. de France,* 310 (1842).
Psammodius sabulosus, *Woll., Ins. Mad.* 230 (1854).

Inhabits Madeira and Porto Santo, occurring amongst *rejectamenta* in and around the towns.

218. Psammodius porcicollis.

P. globoso-ovatus fusco-piceus, prothorace transversim quatuor-sulcato, sulcis profunde punctatis, ad latera et postice ciliato, elytris profunde crenato-striatis, antennis diluto-testaceis, pedibus rufo-piceis, tibiis omnibus dentatis.

Mas (?) tibiis anticis minus fortiter dentatis.

Long. corp. lin. $1\frac{2}{3}$–2.

Aphodius porcicollis, *Illig., Mag. für Ins.* ii. 195 (1803).
—— ——, *Suckow, Nat.* 258 (1830).
Psammodius porcicollis, *Muls., Lamell. de France,* 322 (1842).
—— ——, *Lucas, Col. de l'Algérie,* 267 (1849).

P. globose-ovate and very convex (especially the elytra), brownish-piceous, and but slightly shining: with the *clypeus* (which is a little emarginated at its apex) very rugosely granulated anteriorly, and more or less distinctly sulcated behind. *Prothorax* with four deep transverse grooves, which however are somewhat interrupted along the dorsal line,—especially the hinder ones, which are separated by a short longitudinal channel; the grooves very deeply punctured (the punctures being exceedingly large and distinct); ciliated along its hinder and lateral margins. *Elytra* ventricose, and deeply crenate-striated. *Antennæ* diluted-testaceous. *Legs* bright rufo-piceous, and with *all* the *tibiæ* dentated externally,—the anterior ones, however, in the male (?) sex being less powerfully toothed than in the female; *tarsi* with the basal joint of the four hinder ones somewhat long, and rather largely developed.

The present *Psammodius* was detected by myself on the sand-hills behind the southern beach of Porto Santo, during April and May of 1855; where I took it in tolerable abundance (at a considerable depth beneath the surface), especially at the roots of the *Arundo donax*. It is found in Mediterranean latitudes (being recorded in the south of France and in Algeria), particularly in maritime districts; but it becomes rarer towards the north, and as we recede from the coast: M. Mulsant nevertheless states that it occurs sparingly near Lyons. I possess a series from Marseilles, with which the Porto-Santan specimens agree in every respect, except that their prothoracic sulci are somewhat more interrupted along the dorsal region.

Fam. 22. TROGIDÆ.

Genus 88. TROX.

Fabricius, *Ent. Syst.* i. 86 (1792).

219. **Trox scaber****.

Silpha scabra, *Linn.*, *Syst. Nat.* i. ii. 573 (1767).
Trox arenarius, *Gyll.*, *Ins. Suec.* i. 11 (1808).
—— scaber, *Heer*, *Fna Col. Helv.* i. 533 (1841).
—— ——, *Woll.*, *Ins. Mad.* 233 (1854).

Inhabits Madeira proper, and is hitherto unique,—the single specimen (now in the British Museum, and which may perhaps have been imported into the island) having been captured by the late Dr. Heineken.

Fam. 23. GLAPHYRIDÆ.

Genus 89. CHASMATOPTERUS.

(Dejean, *Cat.*) Latreille, *Reg. An.* iv. 567 (1829).

220. **Chasmatopterus nigrocinctus***.

Chasmatopterus nigrocinctus, *Woll.*, *Ins. Mad.* 236 (1854).

Inhabits Madeira proper, and, like the last species, is unique,—it being, also, from the collection of Dr. Heineken.

Sectio VI. PRIOCERATA.

Fam. 24. BUPRESTIDÆ.

Genus 90. AGRILUS.

(Megerle) Steph., *Ill. Brit. Ent.* iii. 239 (1830).

The detection of a single specimen of an *Agrilus* in these islands, since the publication of the *Insecta Maderensia*, has introduced a new *family* into our Catalogue,—the *Buprestidæ*: and without entering here into the characteristics of that group, which contains some of the most gorgeous, brilliantly coloured members of the Coleoptera, approaching in outline and structure to the *Elateridæ* (though with their hinder prothoracic angles only slightly or not at all produced), but which do not possess, when placed upon their backs, the power of springing; we may state that the *Agrili* are mainly distinguished from their allies by their usually narrow and subcylindrical bodies, by their scutellum being broad (and raised) at its base and abruptly acuminated at its apex, by their prosternum being largely developed in front (so as almost to conceal the mentum), and by their tarsi being rather long,—with the first joint of the hinder ones more elongated than is the case in the *Buprestidæ* generally.

221. **Agrilus Darwinii**, n. sp.

A. subcylindrico-elongatus angustus viridi-splendens ubique densissime rugulosus, prothorace versus angulos posticos unicostato, elytris apicem versus valde attenuatis dehiscentibus, antennis pedibusque paulo obscurioribus.
Long. corp. lin. $4\frac{1}{2}$.

A. subcylindrical-elongate, narrow, slightly shining, of a clear metallic green (with a slightly golden tinge), and densely wrinkled (or rugulose) all over. *Head* much flattened in front, and longitudinally strigulose behind. *Prothorax* rather wider in front than behind; its posterior margin (and therefore the anterior one of the elytra, which is closely applied to it) of a zigzag, or biangulated, form; very uneven, and with a broad interrupted dorsal channel; more or less transversely strigulose; and furnished towards each of its hinder angles with a short, and somewhat curved, costa. *Scutellum* with its front (elevated) portion less rugulose than the rest of the surface. *Elytra* rather pinched-in a little before the middle, and each of them much attenuated towards their apex, where they are slightly divergent; beset with very minute posteriorly-directed points behind; deeply pitted on either side at the base (between the scutellum and either humeral angle), and with the rudiments of a small tubercle in the middle of each of the depressions; with the suture a good deal raised about its central region. *Abdomen* wide behind the middle of the elytra, where (as in most of the *Agrili*) the sides of it are a good deal visible from above. *Limbs* of a rather obscurer hue than (though equally shining with) the rest of the surface; the *antennæ* being nearly filiform, and internally serrated towards their apex.

Captured by myself about a third of the way up the Ribeiro de São Jorge (in the north of Madeira proper) during August of 1855. I have dedicated the species to Charles Darwin, Esq., M.A., V.P.R.S., whose inquiries into the obscurer phenomena of geographical zoology have contributed more than those of any other man living to our knowledge, in the general questions of animal distribution.

Fam. 25. THROSCIDÆ.

Genus 91. TRIXAGUS.

Kugelann, *in Schneid. Mag.* v. 534 (1794).

222. **Trixagus integer**, n. sp.

T. elongato-subellipticus postice attenuatus, rufo-brunneus, dense subflavescente-pubescens, fronte distincte bicostato, oculis magnis convexis integris, elytris leviter striatis, vix seriatim pilosis, inter-

stitiis remote et subtilissime punctulatis, antennis pedibusque ferrugineis paulo longioribus robustioribus.
Long. corp. lin. $1\frac{1}{2}$–$1\frac{2}{3}$.

T. subelliptical, but larger and more elongate than the following species, and rather more attenuated (in proportion) behind, reddish-brown, and densely clothed with a decumbent yellowish-cinereous pubescence. *Head* and *prothorax* regularly punctulated: the *former* with the forehead distinctly bicostate, and with the *eyes* large, convex and entire,—there being no indication of a groove across them. *Elytra* very finely striated, and with the striæ almost impunctate (the punctures being only just perceptible, and very remote from each other, even beneath the microscope); with the interstices distantly and very finely punctulated; and with scarcely any tendency (even behind) to have the pubescence disposed in longitudinal rows. *Limbs* ferruginous; rather longer and more robust than in the following species, and with the club of the *antennæ* larger and more abrupt.

The present *Trixagus* (which is an addition to our Catalogue since the publication of the *Insecta Maderensia*) I had regarded, until my recent examination of it, as the common European *T. dermestoides*, to which in general size and aspect it closely approximates. A careful investigation of its characters, however, has convinced me that it is truly distinct from that species, possessing many small peculiarities (some of them even *structural* ones) which can scarcely be the result of either climatic or any other local influences to which it may have been long exposed. Thus, its frontal costæ are much further apart, or (which is the same thing) are situated nearer to the inner margin of the eyes, than is the case in that insect; and the eyes themselves are much larger, more convex, and *entire*,—being free from any indication of the central groove† which is so well expressed (though it does not extend completely across them) in the *T. dermestoides*, and which is still more developed in the *gracilis*. Then, it is more attenuated posteriorly than its European ally, its elytral striæ and interstices are much less evidently punctured, and its pubescence has scarcely any tendency to be disposed in longitudinal rows. Three specimens of it were detected by myself, amongst rotten wood, in the remote forest region of the Lombo dos Pecegueiros (in

† This curious tendency which the eyes of the *Trixagi* possess, of being impressed across their central region by a furrow, or groove (which is tolerably deep near the insertion of the antennæ, but which becomes gradually shallower, and disappears altogether before reaching the opposite portion of the circumference), I have not seen anywhere alluded to; and I may refer to a notice of my own, lately published in the Proceedings of the Entomological Society of London, on the subject.

the north of Madeira proper) during July 1855; and a fourth has been lately communicated by Mr. Mason.

223. Trixagus gracilis.

T. subellipticus rufo-brunneus dense cinereo-pubescens, fronte obsolete bicostato, oculis in medio sulcatis, elytris leviter punctato-striatis, seriatim pilosis, interstitiis sat crebre et distincte punctulatis, antennis pedibusque ferrugineis.
Long. corp. lin. $1\frac{1}{3}$.

Trixagus gracilis, *Woll., Ins. Mad.* 237 (1854).

T. smaller and less elongate than the preceding species, and with the pubescence of a more strictly cinereous (and therefore less yellowish) tinge. *Head* and *prothorax* punctured as in that insect: the *former*, however, with its two frontal ridges exceedingly delicate and indistinct, and more central in their position, or further removed from the *eyes*,—which are smaller and less convex, and cleft in the middle by a groove which extends almost across them. *Elytra* finely striated (the striæ appearing delicately but distinctly punctured beneath the microscope); with the interstices much more coarsely and closely punctulated than in the *T. integer*; and with the pubescence disposed (especially behind) in very evident longitudinal rows. *Limbs* ferruginous, and somewhat shorter and less robust than in the preceding species; the club of the *antennæ* moreover being less abrupt.

I have added a fresh description of this species, because the characters which distinguish it from the European *T. dermestoides* (and, in like manner, from its newly discovered Madeiran ally) are not sufficiently well expressed in the *Insecta Maderensia*. It still remains unique,—the single specimen (now in the British Museum) which has hitherto come beneath my notice having been taken by myself in the Rev. R. T. Lowe's garden near Funchal, during 1848.

Fam. 26. ELATERIDÆ.

Genus 92. COPTOSTETHUS.

Wollaston, *Ins. Mad.* 238. tab. iv. f. 8 (1854).

224. Coptostethus femoratus.

Coptostethus femoratus, *Woll., Ins. Mad.* 240. tab. iv. f. 8 (1854).

Inhabits the mountains of Porto Santo; exceedingly rare. Two specimens were detected by myself in December 1848, and a third has been lately found by Mr. Bewicke.

Fam. 27. CYPHONIDÆ.

Genus 93. EUCINETUS.

Schüppel, *in Germ. Mag.* iii. 255 (1818).

225. Eucinetus ovum.

Eucinetus ovum, *Woll., Ins. Mad.* 242 (1854).

Inhabits Madeira proper, occurring at intermediate altitudes. Rare.

Fam. 28. TELEPHORIDÆ.

Genus 94. MALTHODES.

Kiesenwetter, *in Linn. Ent.* vii. 265 (1852).

226. Malthodes Kiesenwetteri.

Malthodes Kiesenwetteri, *Woll., Ins. Mad.* 243 (1854).

Inhabits Madeira and Porto Santo, occurring in flowers at intermediate elevations.

Fam. 29. MELYRIDÆ.

Genus 95. MALACHIUS.

Fabricius, *Ent. Syst.* i. 221 (1792).

227. Malachius militaris.

Malachius militaris, *Woll., Ins. Mad.* 245 (1854).

Inhabits Madeira proper, occurring in gardens in and around Funchal.

Genus 96. PECTEROPUS.

Wollaston, *Ins. Mad.* 245. tab. iv. f. 7, 9 (1854).

228. Pecteropus Maderensis.

Pecteropus Maderensis, *Woll., Ins. Mad.* 247. tab. iv. f. 7 (1854).

Inhabits Madeira, the Southern Dezerta and Porto Santo, occurring at high elevations. The specimens from the Southern Dezerta (*var.* β)† are smaller and rather more brilliant than those from

† I would desire to cancel the *var.* β of the *Insecta Maderensia*; for since it is the tendency of the species in all instances to have its head and prothorax beset at the sides with granuliform tubercles, it passes so gradually into the state there indicated that it can be scarcely regarded, under such circumstances, as a legitimate "variety."

Madeira proper; whilst those from Porto Santo (*var.* γ) are the smallest of all, more metallic still, and are, besides, almost free from pubescence. It is locally abundant in Madeira proper, where it is attached principally to the flowers of the *Cineraria aurita* (the *Senecio Maderensis*, DeCand.) of intermediate and lofty altitudes. In the Southern Dezerta it is scarce,—where I detected it, on the 7th of June 1855, amongst the blossoms of the White Poppy on the extreme summit of the rock. And in Porto Santo it is equally rare, the only spot in which I have hitherto observed it being the very top of the Pico Branco,—from whence I brushed several specimens into my net, from off the vegetation, early in May of the same year.

229. **Pecteropus rugosus.**

Pecteropus rugosus, *Woll., Ins. Mad.* 249 (1854).

Inhabits Madeira proper, occurring in flowers, during the spring, at low elevations.

230. **Pecteropus rostratus.**

Pecteropus rostratus, *Woll., Ins. Mad.* 250. tab. iv. f. 9 (1854).

Inhabits Porto Santo, the Dezerta Grande and the Southern Dezerta (or Bugio),—the Porto-Santan specimens (*var.* α) being on the average somewhat paler, more metallic, and less rugose, than those (*var.* β) from the Dezertas.

Genus 97. **DASYTES.**

Paykull, *Fna Suec.* ii. 156 (1798).

231. **Dasytes illustris.**

Dasytes illustris (*Mots.*), *Woll., Ins. Mad.* 252 (1854).

Inhabits Madeira, Porto Santo, and the Dezerta Grande, abounding in flowers at nearly all altitudes.

Genus 98. **MELYROSOMA.**

Wollaston, *Ins. Mad.* 253. tab. v. f. 1, 2 (1854).

232. **Melyrosoma oceanicum.**

Melyrosoma oceanicum, *Woll., Ins. Mad.* 253. tab. v. f. 1 (1854).

Inhabits Madeira proper, occurring in flowers at lofty elevations.

233. **Melyrosoma abdominale**, n. sp.

M. nigrum et pilis nigris longissimis mollibus suberectis vestitum, capite prothoraceque leviter subruguloso-subpunctatis, elytro singulo costis tribus longitudinaliter instructo, interstitiis profunde crebre et rugose subseriatim punctatis, abdomine longiore (an potius elytris minus ampliatis) coleopteris paulo superanti.

Var. β. [an species?] minus pilosum, prothorace vix distinctius sed elytris paulo magis rugose sculpturatis.

Long. corp. lin. vix $1\frac{1}{2}$.

M. smaller and less robust than the *M. oceanicum*, but larger and more robust than the *Artemisiæ*, deep black, and beset with an exceedingly long, fine, nearly erect and dark pile. *Head* and *prothorax* less distinctly roughened and punctured than in either of the other species. *Elytra* sculptured as in the *M. Artemisiæ*,—the punctures being a little coarser, and somewhat more disposed in longitudinal rows, than those of the *oceanicum*. *Mesosternum* more deeply channeled down the centre than that of the *oceanicum*, and more narrowly and minutely cleft (or bifid) at its hinder apex, and appearing beneath the microscope (from its being perhaps somewhat less inflexed between the posterior coxæ) more evidently, as it were, bicuspid. *Abdomen* rather longer than in either of the other species (or, perhaps, more strictly, the elytra somewhat shorter), its apex being perceptibly visible from above,—whereas in the *M. oceanicum* and *Artemisiæ* the elytra far surpass it in length. *Antennæ* a little longer and slenderer than those of the *M. oceanicum* (a trifle longer perhaps than even those of the *Artemisiæ*), and with their apical joint less robust: their base, and the *tarsi*, almost as dark as the rest of the surface.

Var. β. less densely, and more shortly, pilose; and with the prothorax a little more evidently sculptured, but with the elytra somewhat less so.

A single specimen (which is now in the British Museum) of this very distinct *Melyrosoma* was detected by myself on the Ilheo de Fora (the isolated extremity of the Ponta São Lourenço of Madeira proper) on the 23rd of May 1855. As will be perceived from the above description, it partakes of the respective characters of both of the other species; nevertheless in general aspect and hue (though not in the long and suberect pile with which it is clothed) it has more in common with the *M. oceanicum* than with the *Artemisiæ*. It would appear however, like the latter, to occur at a low elevation,—in which respect it differs from the former, which attains its maximum on the mountain tops, and which I have captured in profusion on the extreme summit of the Pico Ruivo (more than 6000 feet above the sea).

The *var.* β was taken by Mr. Leacock, who found a single example

of it (I believe) near Funchal. It may possibly be the exponent of a fourth species; nevertheless I am inclined to suspect that its diminished pubescence and somewhat altered sculpture is merely *a local peculiarity*, and that it may perhaps be the state which obtains on the mainland of Madeira proper. Even supposing this, however, to be the case, I have preferred regarding (since its characters are so well developed) the Ilheo de Fora specimen as the type.

234. **Melyrosoma Artemisiæ.**

Melyrosoma Artemisiæ, *Woll., Ins. Mad.* 254. tab. v. f. 2 (1854).

Inhabits the Northern and Central Dezertas,—especially the former, where it occurs principally amongst the plants of *Artemisia argentea*, Herit.

Fam. 30. CLERIDÆ.

Genus 99. **OPILUS.**

Latreille, *Hist. Nat. des Ins.* iii. 111 [script. *Opilo*] (1802).

235. **Opilus mollis*.**

Attelabus mollis, *Linn., Fna Suec.* 186 (1761).
Opilo mollis, *Lat., Hist. Nat. des Ins.* ix. 149 (1804).
Opilus mollis, *Steph., Ill. Brit. Ent.* iii. 323 (1830).
—— ——, *Woll., Ins. Mad.* 256 (1854).

Inhabits Madeira proper, occurring sparingly,—principally at low elevations.

Genus 100. **NECROBIA.**

Olivier, *Entom.* iv. 76 *bis* (1795).

236. **Necrobia ruficollis**.**

Anobium ruficolle, *Thung., Nov. Spec.* i. 8. f. 7 (1781).
Dermestes ruficollis, *Fab., Ent. Syst.* i. 230 (1792).
Necrobia ruficollis, *Oliv., Ent.* iv. 76. 2. pl. 1. f. 2 (1795).
—— ——, *Woll., Ins. Mad.* 258 (1854).

Inhabits Madeira proper, occurring in the houses of Funchal. Imported.

Fam. 31. PTINIDÆ.

Genus 101. **PTINUS.**

Linnæus, *Syst. Nat.* ii. 565 (1767).

A. *Antennæ basi approximatæ.*

§ I. *Corpus plus minus oblongum pubescens alatum, prothorace gibboso ad basin valde constricto, scutello distincto: antennæ filiformes: tarsi longiusculi filiformes, artº 1mo leviter elongato.* (Ptini *per Europæ partem majorem* typici.)

237. Ptinus testaceus**.

Ptinus testaceus, *Oliv., Ent.* ix. 8 (1790).
—— hirtellus, *Sturm, Deutsch. Fna,* xii. 80. tab. 258. f. A (1837).
—— advena, *Woll., Ins. Mad.* 261 (1854).
—— testaceus, *De Boieldieu, Ann. de la Soc. Ent. de France* (3ième série), iv. 654 (1857).

Inhabits Madeira proper, occurring sparingly in the houses of Funchal. I have recently submitted the *P. advena* of the *Insecta Maderensia* to the inspection of M. de Boieldieu of Paris, who pronounces it to be identical with the *P. testaceus* of Olivier; and I have therefore corrected its synonymy accordingly. The single specimen which I described in 1854 was a female: the male is more elongated and parallel.

238. Ptinus brunneus**.

P. rufo-brunneus valde (præsertim in prothorace) subsetuloso-pubescens, capite scutelloque squamis subfulvescenti-cinereis tectis, elytris ovalibus striato-punctatis, antennis pedibusque elongatis rufo-ferrugineis squamosis.
Long. corp. lin. $1\frac{3}{4}$.

Ptinus brunneus (*Meg.*), *Dufts., Fna Austr.* iii. 65 (1825).
—— ——, *De Boieldieu, Ann. de la Soc. Ent. de France* (3ième série), iv. 649 (1857).

P. reddish-brown, and closely beset (especially on the prothorax) with a long, stiff, suberect, robust, somewhat setiform pile. *Head* and *scutellum* (which last is distinct and round) densely clothed with yellowish-cinereous scales. *Prothorax* rather wide, and gibbous, on the fore-disk; suddenly, and greatly, constricted behind. *Elytra* oval (being a little less rounded-off at the shoulders, and straighter at the sides, than in the *P. testaceus*), and striate-punctate. *Limbs* elongated, rufo-ferruginous, and clothed with yellowish-cinereous scales.

A single example of the present *Ptinus*, which is doubtless an importation into Madeira, was captured by myself on the walls of the Quinta da Favilla, immediately outside Funchal, during April 1855. It has been examined by M. de Boieldieu, of Paris, who has recently monographed the genus, and is identified by him with the *P. brunneus* of Duftschmidt. It is a European species, being recorded in Sicily, Turkey, Austria and France.

239. **Ptinus mauritanicus.**

Ptinus mauritanicus, *Lucas, Col. de l'Algérie*, 208 (1849).
—— ——, *Woll., Ins. Mad.* 261 (1854).

Inhabits Madeira proper, occurring sparingly at low elevations.

§ II. *Corpus plus minus sphæricum squamosum apterum, prothorace convexo, scutello vix observando: antennæ ad apicem plus minus subclavatæ: tarsi breviusculi subacuminati, artis 4 baseos longitudine subæqualibus.* (Ptini aberrantes, *sed in insulis Maderensibus typici.*)

(Genus **TRIGONOGENIUS**, *Gay et Solier*, 1849.)

240. **Ptinus Dawsoni.**

Ptinus Dawsoni, *Woll., Ins. Mad.* 263. tab. v. f. 5 (1854).

Inhabits the Central and Southern Dezertas, occurring under stones and (amongst lichen) in the crevices of the weather-beaten rocks. Rare.

241. **Ptinus nodulus.**

Ptinus nodulus, *Woll., Ins. Mad.* 265 (1854).

Inhabits the mountains of Porto Santo, being found in similar places as the last species.

242. **Ptinus pinguis.**

Ptinus pinguis, *Woll., Ins. Mad.* 264 (1854).

Inhabits Madeira proper, principally at rather low elevations. Rare.

243. **Ptinus orbatus.**

Ptinus orbatus, *Woll., Ins. Mad.* 264. tab. v. f. 6 (1854).

Inhabits Madeira proper, in rotten wood; and is hitherto unique.

244. **Ptinus pilula.**

Ptinus pilula, *Woll., Ins. Mad.* 266 (1854).

Inhabits Madeira proper; and may perhaps be merely a variety of the *P. albopictus*.

245. **Ptinus albopictus.**

Ptinus albopictus, *Woll., Ins. Mad.* 267. tab. v. f. 4 (1854).
—— longicornis, *Woll., Ins. Mad.* 270 (1854).

Inhabits all the islands of the Madeiran Group, occurring within the pithy stems of plants (especially of the *Silybum Marianum*,

Grtn.), in dead wood, and amongst lichen, principally at intermediate altitudes. It passes through many varieties of size and hue, being smaller however on the Northern Dezerta than elsewhere. In the sylvan districts of Madeira proper the males have their antennæ slightly longer than is usually the case in the other islands, and it was this particular state that I described under the name of *P. longicornis*; on a further examination of it, however, I am inclined to believe that it cannot be upheld as a distinct species,—and especially so since the females are perfectly identical with those from the other islands; and I have consequently sunk it.

B. *Antennæ basi distantes.*

246. **Ptinus nigrescens**, n. sp.

P. subater squamis albidis robustis variegatus et parce nigro-pubescens, elytris subquadrato-ovatis sat profunde subruguloso-punctatis, fasciis duabus (sc. basali obsoletissimâ diffusâ et subposticâ plus minus distinctâ) albidis ornatis, antennis pedibusque subgracilibus nigrescentibus.
Variat (immaturus) pedibus dilutioribus.
Long. corp. lin. 1.

P. deep-black, sometimes with a piceous tinge, and more or less variegated with white, robust scales, which are intermixed with a short, black pubescence. *Prothorax* rather short, and rounded at the edges; densely clothed with white scales towards the sides, the disk (except a medial line) being black,—the darker pubescence more erect and rigid than on the elytra. *Elytra* subquadrate-ovate,—having an almost equal tendency to a *squareness* of outline (caused by the shoulders being somewhat less rounded-off, the sides less expanded in the middle, and the apex more suddenly bent inwards, or truncated, than in either of the two preceding species) as in the *P. fragilis*; rather deeply punctured (the punctures being almost as large as those of the *fragilis*, but the surface much more rugulose than in that insect); with the dark pubescence finer, and more dense and decumbent, than on the prothorax; and with the postmedial fascia of white scales at times tolerably apparent, the basal one being generally obsolete. *Limbs* rather slender (especially the antennæ, which are moreover shorter than those of the *albopictus*) and inclining to black,—the *legs* however in immature specimens being more or less ferruginous.

The present *Ptinus* and the following one may be readily known from the other species here enumerated by their basally distant antennæ, dark surfaces, and rather more quadrate elytra: whilst the *P. nigrescens* may be at once recognized from its ally by (*inter alia*) its much longer, darker, and less fragile limbs, more pubescent

surface, less whitened prothorax, and by its rugulose and more variegated elytra. Five specimens of it were captured by myself at Feijãa d'Ovelha (in the west of Madeira proper) during July 1855.

247. **Ptinus fragilis.**

Ptinus fragilis, *Woll., Ins. Mad.* 271 (1854).

Inhabits the Central and Southern Dezertas, and Porto Santo, occurring amongst lichen in the crevices of the rocks.

Genus 102. **MEZIUM.**

(Leach) Curtis, *Brit. Ent.* v. 232 (1828).

248. **Mezium sulcatum****.**

Ptinus sulcatus, *Fab., Spec. Ins.* i. 73 (1781).
—— ——, *Mshm, Ent. Brit.* i. 91 (1802).
Mezium sulcatum, *Curtis, Brit. Ent.* v. 232 (1828).
—— ——, *Woll., Ins. Mad.* 273 (1854).

Inhabits Madeira proper, occurring in and around houses. Imported.

Genus 103. **GIBBIUM.**

Scopoli, *Int. ad Hist. Nat.* 505 (1777).

249. **Gibbium scotias****.**

Ptinus scotias, *Fab., Spec. Ins.* i. 74 (1831).
Gibbium scotias, *Kugell., in Schneid. Mag.* iv. 502 (1794).
—— ——, *Sturm, Deutsch. Fna*, xii. 32. tab. 248 (1837).
—— ——, *Woll., Ins. Mad.* 274 (1854).

Inhabits Madeira proper, occurring in similar places as the last species; and, like it, being evidently introduced.

Genus 104. **ANOBIUM.**

Fabricius, *Syst. Ent.* 62 (1775).

250. **Anobium velatum.**

Anobium velatum, *Woll., Ins. Mad.* 276. tab. v. f. 3 (1854).

Inhabits Madeira and the Southern Dezerta, occurring at low elevations.

251. **Anobium striatum****.**

Anobium striatum, *Oliv., Ent.* ii. 16. 9 (1790).
—— pertinax, *Fab.* [nec *Linn.* 1761], *Ent. Syst.* i. 237 (1792).
—— striatum, *Gyll., Ins. Suec.* i. 291 (1808).
—— ——, *Woll., Ins. Mad.* 278 (1854).

Inhabits Madeira and the Dezerta Grande, occurring sparingly at low and intermediate altitudes.

252. Anobium paniceum**.

Dermestes paniceum, *Linn.*, *Fna Suec.* 431 (1761).
Anobium paniceum, *Oliv.*, *Ent.* ii. 16. 10 (1790).
—— ——, *Steph.*, *Ill. Brit. Ent.* iii. 340 (1830).
—— ——, *Woll.*, *Ins. Mad.* 277 (1854).

Inhabits Madeira proper, being attached to houses in Funchal. Imported.

253. Anobium molle**.

A. subcylindricum ferrugineum pubescens et ubique subtiliter granulatum, prothorace subæquo, antice producto compresso, ad latera (versus angulos posticos) leviter explanato, antennis elongatis, articulis funiculi haud minutis (alternatim longiusculis breviusculis).
Long. corp. lin. $2\frac{1}{3}$–$2\frac{1}{2}$.

Dermestes mollis, *Linn.*, *Fna Suec.* 415 (1761).
Anobium molle, *Fab.*, *Syst. Eleu.* i. 323 (1801).
—— ——, *Gyll.*, *Ins. Suec.* i. 296 (1808).
—— ——, *Steph.*, *Ill. Brit. Ent.* iii. 341 (1830).

A. subcylindrical, ferruginous, densely clothed with a decumbent pile, and closely beset all over with minute granules, which have the appearance of punctures. *Prothorax* rather short, produced in front, and laterally compressed towards the anterior angles; almost even on the disk, though with indications of an obsolete keel behind; with the sides somewhat flattened outwards, especially towards the posterior angles; and with the granules coarser than on the elytra. *Elytra* concolorous with the rest of the surface; unstriated; and with just perceptible traces (particularly in the male sex) of being obscurely nodose immediately before the apex, —a structure which is apt to cause the pubescence to be more apparent (and to seem therefore a little paler) at that point. *Antennæ* long and slender, and with the joints between the second one and the club very much longer than in the other *Anobia* here enumerated,—being, moreover (*inter se*), alternately somewhat long and short.

Two specimens of the common European *A. molle* were captured by myself in Funchal (in the garden of Mr. Bayman, at the Quinta da Favilla) during the spring of 1855. It is probably an introduced species, from more northern latitudes.

254. Anobium Ptilinoides.

Anobium Ptilinoides, *Woll.*, *Ins. Mad.* 278 (1854).

Inhabits Madeira proper, occurring in old houses near Funchal. Rare. (Discovered by Mr. Leacock.)

Fam. 32. CISSIDÆ.

Genus 105. CIS.

Latreille, *Précis des Caract. Gen. des Ins.* 50 (1796).

255. Cis Wollastonii.

Cis Wollastonii, *Mellié, in Guér. Rev. de Zool.* (2ième série), i. 586 (1849).
—— ——, *Woll., Ins. Mad.* 280. tab. v. f. 8 (1854).

Inhabits the damp sylvan districts of Madeira proper, under loose bark of trees. Local.

256. Cis fuscipes.

Cis fuscipes (*Chevrolat*), *Mellié, Ann. de la Soc. Ent. de France* (2ième série), vi. 271. tab. 2. f. 25 (1848).
—— —— ——, *Woll., Ins. Mad.* 281 (1854).

Inhabits Madeira proper, occurring in fungi at low and intermediate elevations.

257. Cis Lauri.

Cis Lauri, *Woll., Ins. Mad.* 282. tab. v. f. 7 (1854).

Inhabits the damp sylvan districts of Madeira proper, abounding beneath bark and in fungi,—especially towards the north of the island.

Genus 106. OCTOTEMNUS.

Mellié, *Ann. de la Soc. Ent. de France* (2ième série), vi. 384 (1848).

258. Octotemnus opacus.

Octotemnus opacus, *Mellié, Ann. de la Soc. Ent. de France* (2ième série), vi. 386 (1848).
—— ——, *Woll., Ins. Mad.* 283 (1854).

Inhabits Madeira proper, occurring in similar places as the last species, and in equal profusion.

Genus 107. PTILINUS.

Geoffroy, *Hist. Abr. des Ins.* i. 65 (1764).

259. Ptilinus cylindripennis.

Ptilinus cylindripennis, *Woll., Ins. Mad.* 285 (1854).

Inhabits Madeira proper, occurring principally in vineyards and gardens around Funchal, but ascending occasionally to a much higher elevation. The males of this insect (if indeed I am correct in regard-

ing them as specifically identical with the, much larger, females captured in the same localities) approach very closely to the common European *P. pectinicornis*; nevertheless the punctures of their elytra are much less apparent (being almost obsolete), and their antennæ are darker. The other sex, however, is abundantly distinct from the corresponding one of its more northern ally.

Genus 108. **RHYZOPERTHA.**

Stephens, *Ill. Brit. Ent.* iii. 354 (1830).

260. **Rhyzopertha pusilla****.

Synodendron pusillum, *Fab., Ent. Syst.* v. (*Suppl.*) 156 (1798).
Ptinus fissicornis et piceus, *Mshm, Ent. Brit.* i. 82 et 88 (1802).
Rhyzopertha pusilla, *Steph., Ill. Brit. Ent.* iii. 354 (1830).
—— ——, *Woll., Ins. Mad.* 287 (1854).

Inhabits Madeira proper, occurring amongst stores in and around Funchal. Imported.

Sectio VII. RHYNCOPHORA.

Fam. 33. TOMICIDÆ.

Genus 109. **TOMICUS.**

Latreille, *Hist. Nat. des Ins.* iii. 203 (1802).

261. **Tomicus erosus***, n. sp.

T. lato-cylindricus nitidus piceo-ferrugineus et parce pilosus, prothorace punctato, antice rotundato necnon mucronibus asperato, elytris profunde punctato-striatis, ad apicem valde truncatis spinosis.

Long. corp. lin. $1\frac{2}{3}$.

T. of the same form as the *T. villosus*, but larger and thicker, more shining, and less pilose,—the hairs being shorter, more decumbent, and fewer than in that species. *Prothorax* rather deeply punctured behind, and greatly roughened with large transverse plaits and tubercles in front,—where it is rounded and produced. *Elytra* deeply punctate-striated, the interstices having a longitudinal row of minute and distant punctures down each; suddenly and greatly truncated, or as it were eaten-out, behind, and with the edges of the impressed (or truncated) portion armed with several posteriorly-directed spines. *Limbs* paler.

Detected by Mr. Bewicke, beneath the dead bark of Spanish-

chestnut trees, at the Mount (above Funchal), during May 1856. It is allied to the European *T. Laricis*, but is somewhat shorter and broader, much less pubescent, and with the spines at the truncated apex of its elytra considerably smaller: its tibiæ also (especially the four hinder ones) are less powerfully armed along their outer edge. The specimens in the British Museum were presented by their captor, Mr. Bewicke.

262. **Tomicus villosus.**

Bostrichus villosus, *Fab., Ent. Syst.* i. ii. 367 (1792).
Ips villosus, *Mshm, Ent. Brit.* i. 53 (1802).
Tomicus villosus, *Steph., Ill. Brit. Ent.* iii. 356 (1830).
—— ——, *Woll., Ins. Mad.* 290 (1854).

Inhabits Madeira proper, occurring sparingly beneath bark (for the most part of chestnut-trees) below the altitude of about 2500 feet.

263. **Tomicus Dohrnii.**

Tomicus Dohrnii, *Woll., Ins. Mad.* 290 (1854).

Inhabits the sylvan districts of Madeira, principally at high elevations.

264. **Tomicus perforans,** n. sp.

T. cylindricus nitidissimus fusco-ferrugineus et minus pilosus, prothorace amplissimo subtiliter et parcius punctulato, mox ante medium subnodoso-convexo, antice dilatato obtuse rotundato necnon mucronibus asperato, elytris lævissime seriatim punctatis (seriebus alternis vix observandis), ad apicem leviter oblique truncatis.
Long. corp. lin. $1\frac{1}{3}$.

T. closely allied to the *T. Dohrnii*, but perhaps a trifle larger and broader, paler in hue, less pilose, and very much more highly polished. *Prothorax* somewhat longer than in that insect, being even more developed in front,—so that the convexity on its disk is more medial (being but very slightly *before* the middle); more distinctly punctulated behind (the punctures however being even more remote), and very much brighter,—there being no appearance beneath the microscope of the minutely subgranulose structure which causes the surface in that species to be almost opake. *Elytra* as in the *T. Dohrnii*, but a trifle shorter and less parallel; with their interstices somewhat broader; the punctures down the interstices fewer and more distinct; and with the granuliform spinules at the apex (which is perhaps a little more truncated) less minute.

Inhabits the wine-stores of Funchal, feeding on the bungs of the casks. It was first pointed out to me by Mrs. Phelps, during the summer of 1855, who stated that it was at times exceedingly

troublesome,—procuring for me a cork which had been completely destroyed by it.

Genus 110. APHANARTHRUM.

Wollaston, *Ins. Mad.* 292. tab. vi. f. 2 (1854).

265. Aphanarthrum Euphorbiæ.

Aphanarthrum Euphorbiæ, *Woll., Ins. Mad.* 293. tab. vi. f. 2 (1854).

Inhabits the sylvan districts of Madeira proper, principally of a lofty elevation, being attached to the gigantic Tree-Euphorbia (*Euphorbia mellifera*, Linn. fil.).

Genus 111. LEIPARTHRUM.

Wollaston, *Ins. Mad.* 294. tab. v. f. 9. et tab. vi. f. 3 (1854).

266. Leiparthrum mandibulare.

Leiparthrum mandibulare, *Woll., Ins. Mad.* 295. tab. v. f. 9 (1854).

Inhabits Madeira proper, and is hitherto unique,—the single specimen (now in the British Museum) having been captured by myself in the Chestnut-woods of Santa Anna during the summer of 1850.

267. Leiparthrum bituberculatum.

Leiparthrum bituberculatum, *Woll., Ins. Mad.* 297. tab. vi. f. 3 (1854).

Inhabits the intermediate districts of Madeira proper, occurring principally within the region of the Chestnut-woods.

268. Leiparthrum curtum.

Leiparthrum curtum, *Woll., Ins. Mad.* 298 (1854).

Inhabits Madeira proper, and is hitherto unique, having been detected by myself (during February 1848) in the Rev. R. T. Lowe's garden near Funchal.

269. Leiparthrum Artemisiæ.

Leiparthrum Artemisiæ, *Woll., Ins. Mad.* 299 (1854).

Inhabits the Northern Dezerta, occurring amongst the *Artemisia argentea*, Herit., with which that rock abounds.

Genus 112. HYPOBORUS.

Erichson, *in Wiegm. Archiv*, ii. 62 (1836).

The little genus *Hypoborus* is very closely related to *Leiparthrum*; nevertheless the formation of its (rather longer) antennæ, which have

five joints to their funiculus, instead of only four, and a rounder club, will at once, apart from minor differences, remove it therefrom. The line of separation between the first and second joints of its feet is (on account of their being of the same breadth) not very readily detected, except under a high magnifying power; nevertheless when viewed beneath the microscope, it is sufficiently apparent. In this respect, also, it recedes from *Leiparthrum*, in which I cannot distinguish more than four articulations,—the basal one being obsolete; or, at any rate, if not positively absent, so far absorbed within the spinose apex of the tibiæ as to be completely inappreciable.

270. **Hypoborus Ficus***.

H. subcylindricus nigro-fuscus et setis rigidis griseis erectis obsitus, prothorace ad latera rotundato, elytris rugulosis striato-punctatis, antennis læte testaceis, pedibus ferrugineis.
Long. corp. lin. $\frac{3}{4}$.

Bostrichus Fici, *Dej. Cat.* (edit. 1) 101 (1821).
Hypoborus Ficus, *Erich., in Wiegm. Archiv*, ii. 62 (1836).
—— ——, *Lucas, Col. de l'Algérie*, 462. pl. 39. f. 2 (1849).

H. subcylindrical, but rather short and thick, blackish-brown, and beset all over (though especially on the elytra) with rigid, more or less erect, griseous setæ. *Prothorax* large and rather rough, but very obscurely punctured; narrowed in front, and with the sides rounded behind,—where it is a little wider than the elytra. *Elytra* obscurely striate-punctate; with the robust scale-like setæ disposed in very evident longitudinal rows, and with longer and more erect ones implanted remotely on the interstices; with their basal margin considerably raised in the centre (even more so than in the *Leiparthra*), where it is sometimes rufescent. *Antennæ* bright testaceous. *Legs* piceo-ferruginous.

Very closely resembling, at first sight, the *Leiparthrum bituberculatum*; nevertheless, apart from the structural differences in its antennæ and feet, already pointed out (but which require the microscope to be appreciated), it may be at once known from that insect by its shorter and thicker outline, its more laterally-rounded and basally wider prothorax, by the longer and more erect setæ with which it is beset, and by the brightly testaceous hue of its antennæ. Two specimens of it were detected by myself near the low vineyard-district behind the sea-beach of Porto Santo during April 1855; and a third in Madeira proper (in a garden at Funchal) in the autumn of the same year. It is a species of Mediterranean latitudes (occurring throughout the south of Europe and the north of Africa), and would appear to reside normally beneath the bark of the Fig-tree (*Ficus carica*, Linn.).

Fam. 34. HYLESINIDÆ.

Genus 113. PHLŒOPHTHORUS.

Wollaston, *Ins. Mad.* 299. tab. vi. f. 1 (1854).

271. Phlœophthorus perfoliatus.

Phlœophthorus perfoliatus, *Woll., Ins. Mad.* 301. tab. vi. f. 1 (1854).

Inhabits the sylvan districts in the north of Madeira proper. Very rare.

Genus 114. HYLURGUS.

Latreille, *Gen. Crust. et Ins.* ii. 274 (1807).

272. Hylurgus ligniperda**.

Bostrichus ligniperda, *Fab., Ent. Syst.* i. ii. 367 (1792).
Hylesinus ligniperda, *Gyll., Ins. Suec.* iii. 335 (1813).
Hylurgus ligniperda, *Erich., in Wiegm. Archiv*, i. 52 (1836).
—— ——, *Woll., Ins. Mad.* 302 (1854).

Inhabits Madeira and the Dezerta Grande,—occurring in the pine-woods of the former (principally in the south and east of the island), and in a small fir-plantation of the latter, which has been planted near its summit. Naturalized.

273. Hylurgus piniperda**.

Dermestes piniperda, *Linn., Fna Suec.* 421 (1761).
Dendroctonus piniperda, *Erich., in Wiegm. Archiv*, ii. 53 (1836).
Hylurgus piniperda, *Redt., Fna Austr.* 364 (1849).
—— ——, *Woll., Ins. Mad.* 303 (1854).

Inhabits Madeira proper, and is evidently introduced from more northern latitudes,—the only two specimens which I have seen having been taken, one (now in the British Museum) by Mr. Leacock, and the other by Mr. Bewicke, near Funchal.

Genus 115. HYLASTES.

Erichson, *in Wiegm. Archiv*, ii. 47 (1836).

274. Hylastes Trifolii.

Hylesinus Trifolii, *Müll., in Journ. de la Soc. des Sci. du Dép. du Mont Tonnerre* (1803).
—— ——, *Schmidt, in Stett. Ent. Zeit.* v. 395 (1844).
Hylastes Trifolii, *Woll., Ins. Mad.* 304 (1854).

Inhabits the intermediate elevations of Madeira proper, occurring sparingly beneath bark,—principally within the Chestnut-districts.

275. Hylastes clavus.

Hylastes clavus, *Woll., Ins. Mad.* 305 (1854).

Inhabits Madeira proper, occurring beneath logs, and the bark of trees, at rather low and intermediate altitudes.

Fam. 35. CURCULIONIDÆ.

(Div. I. MECORHYNCHI.)

(Subfam. 1. COSSONIDES.)

Genus 116. RHYNCOLUS.

(Creutzer) Germ., *Ins. Spec.* 307 (1824).

276. Rhyncolus tenax.

Rhyncolus tenax, *Woll., Ins. Mad.* 307 (1854).

Inhabits Madeira proper, abounding beneath bark and in rotten wood throughout the sylvan districts.

Genus 117. PHLŒOPHAGUS.

Schönherr, *Gen. et Spec. Curc.* iv. 1047 (1838).

277. Phlœophagus sulcipennis*.

Phlœophagus sulcipennis, *Woll., Ins. Mad.* 308 (1854).

Inhabits Madeira proper, the only two specimens which I have seen (and which are now in the British Museum) being from the collection of the late Dr. Heineken.

Genus 118. LEIPOMMATA (nov. gen.).

Corpus parvum, fusiformi-ovatum, sculpturatum, valde pubescens: *rostro* breviusculo, crassiusculo, vix arcuato, leviter deflexo; *oculis* nullis (omnino obsoletis): *prothorace* ad latera rotundato: *scutello* minuto: *elytris* subovatis basi truncatis, subconnatis: *abdomine* e segmentis 5 composito, segm^{to} 1mo et 2do magnis inter se arcte connatis, reliquis liberis (3^{tio} 4toque brevibus, apicali paulo longiore): *alis* obsoletis. *Antennæ* breves, crassæ, vix ante medium rostri insertæ; scapo clavato, robusto, leviter arcuato; funiculo 7-art^{o}, art^{o} 1mo majore, reliquis longitudine æqualibus, latitudine paulo crescentibus, ultimo clavæ haud arcte adpresso; capitulo solido, ovato, obscurissime annulato. *Pedes* breves, validi, subæquales, *antici* basi approximati, *postici* distantes: *femoribus* muticis: *tibiis* subrectis, ad apicem externum in uncum maximum valde incurvum, sed ad internum in spinam magnam, productis; *anticis* intus versus

apicem longe pilosis: *tarsis* art° 1^mo^ longiusculo, 2^do^ et 3^tio^ minoribus subæqualibus (*hoc vix dilatato et vix bilobo*), ultimo 1^mi^ fere longitudine subclavato, *unguiculis* parvis simplicibus munito.

A λείπω relinquo, et ὄμμα oculus.

The very remarkable little insect from which the above generic diagnosis has been compiled is one of the most anomalous members of the *Curculionidæ* with which I am acquainted, its total freedom from eyes (which are not so much as indicated even beneath the microscope), in conjunction with the peculiarities of its tibiæ and feet (the former of which, in addition to the immensely developed hook at their external apex, are prolonged at their *inner* angle into a robust spine; whilst the latter have their third joint scarcely at all expanded or bilobed,—a structure of the rarest occurrence in the present family), giving it a character which it is impossible to mistake. This non-development of its organs of sight, however, and the comparatively minute size (for the *Curculionidæ*) of its antepenultimate tarsal articulation, are in perfect keeping with its habits,—the species apparently subsisting within the roots and stalks of the various plants, at a considerable depth underground, on the loose drifting sand-hills immediately behind the sea-beach of Porto Santo (into which, moreover, the powerful terminal spur with which the inner apices of all its tibiæ are additionally armed causes it to burrow with dexterity). I have captured it as much as a foot and a half beneath the surface,—to which its entire exemption from eyes would seem to imply that it seldom, even in the perfect state (except perchance occasionally by accident), ascends: a fact which at once accounts for, likewise, the smallness of the third joint of its feet,—the especial use of the broadly cordate structure of that articulation, which is nearly universal throughout the *Rhyncophora*, being to enable the creatures to adhere firmly to the stems and foliage of plants, on which they principally subsist. In less important details, its *pilose* body (for an underground feeder) is very remarkable; though its subconnate elytra and evanescent wings are of course in complete accordance with its general economy.

278. **Leipommata calcaratum,** n. sp.

L. fusco-ferrugineum subnitidum, pilis longis mollibus griseis ubique parce vestitum, prothorace profunde punctato, elytris rugulosis seriatim punctatis (seriebus alternis e punctis minoribus compositis), antennis brevibus, capitulo dilutiore.

Long. corp. lin. $1\frac{1}{2}$–$1\frac{2}{3}$.

L. fusiform-ovate, brownish-ferruginous, slightly shining, and clothed all over (though not very densely) with a long, soft, suberect,

griseous pile. *Rostrum* short, deeply punctured, and longitudinally strigulose. *Prothorax* deeply and regularly punctured, rounded at the sides, and with indications of a slightly raised central line behind. *Elytra* rugulose (the punctures being somewhat obliquely impinged, so as to cause their anterior edges to be a little prominent); very obscurely striated, but seriate-punctate,—the alternate rows being composed of smaller punctures; the sutural line a trifle darker than the rest of the surface. *Antennæ* short and robust, and with their club paler. *Legs* brownish-piceous.

Detected by myself, during May 1855, at the roots of various plants (especially the *Arundo donax*) on the sand-hills of Porto Santo, at a considerable depth beneath the surface.

Genus 119. **CAULOTRUPIS.**

Wollaston, *Ins. Mad.* 308. tab. vi. f. 6–9 (1854).

279. **Caulotrupis lacertosus.**

Caulotrupis lacertosus, *Woll.*, *Ins. Mad.* 309. tab. vi. f. 6 (1854).

Inhabits Madeira and the Dezerta Grande,—occurring beneath the bark of trees (and in rotten wood) in the damp sylvan regions of the former, and at the stems of shrubby plants on the extreme summit of the latter.

280. **Caulotrupis lucifugus.**

Caulotrupis lucifugus, *Woll.*, *Ins. Mad.* 310. tab. vi. f. 7 et 9 (1854).

Inhabits all the islands of the group, adhering to the undersides of stones, and to the stalks of low shrubby plants, in exposed, windy spots. In Madeira proper it is rare, where the specimens (*var.* α) have their elytra rather evidently striated and subrugulose, and generally with a slightly æneous tinge. On the Dezerta Grande (*var.* β) it is likewise scarce; and has its prothorax a little less closely punctured than in Madeira proper, its rostrum somewhat more densely (and roughly) so, whilst its elytra are not quite so distinctly striated, and are usually more free from an æneous tinge. In Porto Santo (*var.* γ), where it is tolerably common on the mountain slopes, it is more lightly punctured still (its striæ being nearly evanescent), and its elytra are, for the most part, more metallic than in any of the other varieties. On the Ilheo Chão (*var.* δ) it abounds, and presents nearly the same modification as on the Central Dezerta, only it is a trifle more fusiform and shining, and its punctuation (at any rate of the rostrum) is perhaps a little finer. And, lastly, on the Southern Dezerta (*var.* ε) it is thicker and more ovate than in any of the other islands, the punctuation of its prothorax and rostrum (the former of

which is unusually convex) is very much coarser and more dense, whilst its elytra (which are almost entirely free from any metallic lustre, and are subrugulose) are in most instances more evidently striated and punctured than is the case in any of the preceding states.

281. **Caulotrupis impius.**

Caulotrupis impius, *Woll., Ins. Mad.* 311 (1854).

Inhabits Madeira and the two Southern Dezertas, being extremely rare in the former (from whence I have hitherto seen only a single specimen, detected by Mr. Leacock), but abounding on the Dezerta Grande,—where it infests the stalks of the *Silybum Marianum*, Grtn. (the *Holy Thistle* of the ancients). I captured a single example on the summit of the Southern Dezerta, on the 7th of June 1855.

282. **Caulotrupis terebrans.**

Caulotrupis terebrans, *Woll., Ins. Mad.* 312. tab. vi. f. 8 (1854).

Inhabits Porto Santo,—towards the summits of the peaks. Exceedingly rare.

283. **Caulotrupis Chevrolatii.**

Caulotrupis Chevrolatii, *Woll., Ins. Mad.* 313 (1854).

Inhabits Madeira proper, occurring in the damp sylvan districts (principally beneath logs and chippings of wood) at a high elevation.

284. **Caulotrupis opacus.**

Caulotrupis opacus, *Woll., Ins. Mad.* 313 (1854).

Inhabits Madeira proper, in similar spots as the last species, but scarcely ascending to quite so lofty an altitude.

285. **Caulotrupis conicollis.**

Caulotrupis conicollis, *Woll., Ins. Mad.* 314 (1854).

Inhabits Madeira and the Dezerta Grande, attaining its maximum from about 1600 to 2000 feet above the sea. On the latter island the specimens (*var.* β) are a little less pyriform than in Madeira proper, their elytra being rather less expanded in the middle.

Genus 120. **CAULOPHILUS.**

Wollaston, *Ins. Mad.* 315. tab. vi. f. 4 (1854).

286. **Caulophilus sculpturatus.**

Caulophilus sculpturatus, *Woll., Ins. Mad.* 315. tab. vi. f. 4 (1854).

Inhabits Madeira proper, and is hitherto unique,—the single specimen (now in the British Museum) having been captured by myself near the Cabo Gerajão, during the autumn of 1847.

Genus 121. **STENOTIS.**

Wollaston, *Ins. Mad.* 316. tab. vi. f. 5 (1854).

287. **Stenotis acicula.**

Stenotis acicula, *Woll., Ins. Mad.* 316. tab. vi. f. 5 (1854).

Inhabits Madeira proper, occurring in the damp sylvan districts in the north of the island. Very rare.

Genus 122. **MESITES.**

Schönherr, *Gen. et Spec. Curc.* iv. 1043 (1838).

288. **Mesites Euphorbiæ.**

Mesites Euphorbiæ, *Woll., Ins. Mad.* 318 (1854).

Inhabits the lofty sylvan districts of Madeira proper, subsisting on the Tree-Euphorbia (*Euphorbia mellifera*, Linn. fil.).

289. **Mesites Maderensis.**

Mesites Maderensis, *Woll., Ins. Mad.* 319 (1854).

Inhabits the sylvan districts of Madeira proper, attaining its maximum at a lofty elevation,—and occurring principally beneath the loose bark of the native Laurels.

(Subfam. 2. RHYNCOPHORIDES.)

Genus 123. **SITOPHILUS.**

Schönherr, *Gen. et Spec. Curc.* iv. 967 (1838).

290. **Sitophilus granarius****.

Curculio granarius, *Linn., Fna Suec.* 587 (1761).
Calandra granaria, *Steph., Ill. Brit. Ent.* iv. 9 (1831).
Sitophilus granarius, *Schön., Gen. et Spec. Curc.* iv. 977 (1838).
—— ——, *Woll., Ins. Mad.* 321 (1854).

Inhabits Madeira proper, occurring in the granaries and storehouses of Funchal. Imported.

291. Sitophilus Oryzæ**.

Curculio Oryzæ, *Linn., Cent. Ins.* 12 (1763).
Calandra Oryzæ, *Steph., Ill. Brit. Ent.* iv. 9 (1831).
Sitophilus Oryzæ, *Schön., Gen. et Spec. Curc.* iv. 981 (1838).
—— ——, *Woll., Ins. Mad.* 322 (1854).

Inhabits Madeira proper, occurring in the same places as the preceding species, but much more abundantly. Likewise imported. It is found also in the Canary Islands.

(Subfam. 3. CIONIDES.)

Genus 124. CIONUS.

Clairville, *Ent. Helv.* i. 64 (1798).

292. Cionus pulchellus.

Curculio pulchellus, *Hbst, Käf.* vi. 356 (1795).
Cleopus pulchellus, *Steph., Ill. Brit. Ent.* iv. 19 (1831).
Cionus pulchellus, *Schön., Gen. et Spec. Curc.* iv. 741 (1838).
—— ——, *Woll., Ins. Mad.* 323 (1854).

Inhabits Madeira proper, occurring on the plants of *Scrofularia* at intermediate altitudes.

(Subfam. 4. CRYPTORHYNCHIDES.)

Genus 125. CEUTORHYNCHUS.

(Schuppel) Schönherr, *Curc. Disp. Meth.* 298 (1826).

293. Ceutorhynchus Echii.

Curculio Echii, *Fab., Ent. Syst.* i. ii. 436 (1792).
Nedyus Echii, *Steph., Ill. Brit. Ent.* iv. 38 (1831).
Ceutorhynchus Echii, *Schön., Gen. et Spec. Curc.* iv. 504 (1837).
—— ——, *Woll., Ins. Mad.* 325 (1854).

Inhabits Madeira, Porto Santo, and the Dezerta Grande, occurring on the *Echium violaceum*, Linn., at intermediate elevations.

294. Ceutorhynchus quadridens*.

Curculio quadridens, *Pnz., Fna Germ.* xxxvi. 13 (1796).
Nedyus Borraginis, *Steph., Ill. Brit. Ent.* iv. 35 (1831).
Ceutorhynchus quadridens, *Schön., Gen. et Spec. Curc.* iv. 534 (1837).
—— ——, *Woll., Ins. Mad.* 326 (1854).

Inhabits Madeira and the Dezerta Grande, at intermediate altitudes. Rare.

295. **Ceutorhynchus nigroterminatus.**

Ceutorhynchus nigroterminatus, *Woll., Ins. Mad.* 327 (1854).

Inhabits Madeira proper, occurring at rather low and intermediate elevations. Rare.

296. **Ceutorhynchus lineatotessellatus.**

Ceutorhynchus lineatotessellatus, *Woll., Ins. Mad.* 327 (1854).

Inhabits Madeira proper, perforating the thick succulent leaves of the *Sempervivum patina* (Lowe MS.), which studs the rocks at low and intermediate altitudes.

Genus 126. **CŒLIODES.**

Schönherr, *Curc. Disp. Meth.* 296 (1826).

297. **Cœliodes fuliginosus**.**

Curculio fuliginosus, *Mshm, Ent. Brit.* i. 280 (1802).
Ceutorhynchus fuliginosus, *Steph., Ill. Brit. Ent.* iv. 25 (1831).
Cœliodes fuliginosus, *Schön., Gen. et Spec. Curc.* iv. 291 (1837).
—— ——, *Woll., Ins. Mad.* 329 (1854).

Inhabits Madeira proper, occurring sparingly in cultivated grounds in and around Funchal. Probably introduced.

Genus 127. **ACALLES.**

Schönherr, *Curc. Disp. Meth.* 295 (1826).

298. **Acalles saxicola.**

Acalles saxicola, *Woll., Ins. Mad.* 332 (1854).

Inhabits the Dezerta Grande, occurring beneath stones on the high land at the northern end of the island.

299. **Acalles histrionicus,** n. sp.

A. elliptico-ovatus, squamis albidis cinereisque irroratus; prothorace subintegro; elytris profunde punctato-striatis, versus scutellum impressis, ad latera rotundatis, minus nodulosis, plagâ lunulatâ postmediâ ornatis; antennis brevibus; pedibus annulato-variegatis. Long. corp. lin. 2.

A. elliptical-ovate, and besprinkled all over with ashy-white and yellowish-cinereous scales. *Rostrum* piceous; in the males opake and roughly punctured. *Prothorax* almost entire, there being but slight indications of a dorsal channel, and apparently no tubercles across the central portion; only slightly produced at the apex,

where it is not much more setose than elsewhere. *Elytra* very deeply and regularly punctate-striated; somewhat impressed at the base, in the region of the scutellum (which itself, however, is not visible); regularly rounded at the sides, the broadest part being about the middle; with the nodules and interrupted ridges very slightly developed,—those however at the base, between the central depression and the humeral angles, being the most so; and with a broad, transverse, lunulate, postmedial patch, common to both, more distinctly pale,—the region between it and the apex being more evidently speckled with black than the rest of the surface. *Antennæ* and *tarsi* short and ferruginous. *Femora* and *tibiæ* much variegated with darker and paler rings.

The single specimen from which the above description has been drawn out is the first *Acalles* which I have hitherto detected in Porto Santo. It was captured by myself by brushing the coarse herbage beneath a patch of stunted trees (almost the only ones in the island) near the ruins of the church of Nossa Senhora da Grace, above the town. Its exceedingly dappled, or rather irrorated, surface, in conjunction with its *broad* lunate postmedial patch, which extends almost across its (deeply striated) elytra, and the depression about the region of the scutellum, will immediately distinguish it from its allies.

300. **Acalles pulverulentus.**

Acalles pulverulentus, *Woll., Ins. Mad.* 333 (1854).

Inhabits Madeira proper, occurring in rather low spots towards the coast.

301. **Acalles oblitus.**

Acalles oblitus, *Woll., Ins. Mad.* 333 (1854).

Inhabits Madeira proper, occurring in similar places as the last species; and, like it, being exceedingly rare.

302. **Acalles nodiferus.**

Acalles nodiferus, *Woll., Ins. Mad.* 334 (1854).

Inhabits Madeira proper, attaining its maximum within the sylvan districts at a high elevation. Whilst describing this species, in the *Insecta Maderensia*, I had but a single specimen, and that a rubbed female one, to judge from. In the summer of 1855, however, I detected three males amongst lichen on the trunk of an old tree in the upland region of the Fanal, and a fourth beneath the loosened bark of a felled Vinhatico immediately below the Encumeado of São Vincente; and a male and two females have been lately communicated to me by Mr. Bewicke from the Ribeiro Frio. With this

additional material, therefore, I am enabled to arrive at the following particulars: viz., that the species is larger and more brightly variegated than the description there given would imply,—the largest examples ranging to $4\frac{1}{2}$ lines in length; whilst the transverse postmedial patch of its elytra (although rather narrow) is bright and distinct: the legs also of its males are very much longer than those of any other *Acalles* here enumerated. Although I can scarcely imagine that I was mistaken in giving the vicinity of Funchal as the "habitat" for the specimen described (for I believe that I captured it on the cliffs to the eastward of the town), it is evident that the insect belongs normally to a higher altitude, ascending to nearly 6000 feet above the sea.

303. **Acalles coarctatus**, n. sp.

A. elongato-ovatus angustulus, squamis brunneis subflavescentibusque variegatus; prothorace transversim setoso-tuberculato, ad apicem valde bifasciculato-setoso; scutello distincto; elytris punctato-striatis, postice valdius productis coarctatis, carinis interruptis nodulisque setosis (præsertim post medium) instructis, pone medium longe bifasciculato-setosis, inde ad apicem plagâ hastatâ pallidiore ornatis.
Long. corp. lin. $2\frac{1}{2}$–$2\frac{2}{3}$.

A. elongate-ovate, and densely variegated all over with brown and somewhat yellowish scales. *Rostrum* piceous, opake, and roughly punctured, in the males; rufo-piceous, shining, and less punctured in the females. *Prothorax* a good deal attenuated both before and behind, but rounded in the middle; with a broad but shallow dorsal channel, and with four setose tubercles across the central portion (the inner ones of which are the most evident); produced and very setose at the apex, where the setæ arrange themselves into two distinct fascicles. *Scutellum* very apparent, and clothed with paler scales. *Elytra* very much lengthened-out, and coarctate, behind; likewise a good deal rounded-off, and narrowed, at the shoulders, where they are of exactly the same breadth as the base of the prothorax; punctate-striated; with the nodules and interrupted ridges tolerably developed (especially behind the middle) and very setose,—the two larger postmedial ones forming two very prominent, somewhat divaricate, setose fascicles, behind which there is a paler hastate patch extending quite to the apex. *Antennæ* ferruginous. *Legs* very setose.

A singular *Acalles*, readily known by its being more coarctate and produced behind than any of the other species here enumerated, by its prothorax and elytra being of precisely the same breadth at the point of union, by the dull yellowish-brown setæ and scales with which it is clothed, by the largeness of its *divaricating* hinder elytral fascicles,

and by the palish hastate patch being continued to the extreme apex. It is apparently very rare, and confined to the sylvan districts of Madeira proper,—three specimens (two of which were captured in the Boa Ventura, and the other in the Ribeiro de São Jorge) having been taken by myself during the summer of 1855.

304. **Acalles Vau.**

Acalles Vau, *Woll., Ins. Mad.* 335 (1854).

Inhabits Madeira proper, occurring in the sylvan districts of a high elevation.

305. **Acalles festivus,** n. sp.

A. oblongo-ovatus, squamis brunneis nigrisque lætc pictus; prothorace transversim vix setoso-tuberculato; elytris punctato-striatis, carinis interruptis nodulisque obscuris subsetosis instructis, figurâ V latissimâ communi postmediâ (antice abrupte nigro-terminatâ, postice in apicem albidum suffusâ), maculâ subscutellari et fasciâ antemediâ obliquâ fractâ ornatis.
Long. corp. lin. 2–2½.

A. oblong-ovate, densely and beautifully maculated with brown and black scales. *Prothorax* a trifle longer, and less expanded at the sides, than in the allied species; and also less tubercular, or fasciculated. *Elytra* punctate-striated, and not quite so coarctate towards the apex as in the *A. ornatus*; with the interrupted ridges and nodules but slightly developed; and with a large, wide, acute, V-shaped postmedial patch, common to both (abruptly terminated in front by a dark portion of the surface, but usually completely confluent behind with the, likewise pale, apex), a suffused blotch about the scutellum, and a narrow, oblique, broken (sometimes obsolete) antemedial fascia, more or less brightly paler. *Limbs* as in the other species, except that the tibiæ are apparently ornamented by only a single darker ring,—whereas in the nearly-allied *A. ornatus* they are generally bi-annulated.

The beautifully, and rather brightly maculated surface of the present *Acalles*, the hinder portion of which (from the large and *wide* V-shaped patch with which it is ornamented being confluent posteriorly with the pallid apex) is generally altogether pale, in conjunction with its but slightly developed nodules, rather elongated prothorax, and apparently only one-ringed tibiæ, will serve to distinguish it from its allies. Seven specimens of it have been lately detected in Madeira proper by Mr. Bewicke,—beneath the loosened bark of trees in a wooded ravine, immediately over the ridge to the westward of the D'Escalas bridge, beyond the Pico d'Arribentão. The example in the British Museum was presented by its captor.

306. **Acalles terminalis.**

Acalles terminalis, *Woll., Ins. Mad.* 335 (1854).

Inhabits Madeira proper, occurring in similar spots as the last species.

307. **Acalles ornatus.**

Acalles ornatus, *Woll., Ins. Mad.* 336 (1854).

Inhabits Madeira proper, in similar localities as the other allied species.

308. **Acalles dispar.**

Acalles dispar, *Woll., Ins. Mad.* 337 (1854).

Inhabits Madeira proper, and is the most abundant of the *Acalles* here enumerated, occurring in most of the damp sylvan regions, especially towards the north of the island.

309. **Acalles albolineatus.**

Acalles albolineatus, *Woll., Ins. Mad.* 338 (1854).

Inhabits Madeira proper; rare,—occurring with the other sylvan species.

310. **Acalles globulipennis.**

Acalles globulipennis, *Woll., Ins. Mad.* 339 (1854).

Inhabits Madeira proper, being not uncommon (beneath loosened bark, &c.) within the forest districts.

311. **Acalles lunulatus.**

Acalles lunulatus, *Woll., Ins. Mad.* 340 (1854).

Inhabits Madeira proper, being tolerably common within the wooded regions of intermediate and lofty altitudes.

312. **Acalles cylindricollis.**

Acalles cylindricollis, *Woll., Ins. Mad.* 341 (1854).

Inhabits Madeira proper, and is hitherto unique, the single example having been captured by myself at the extreme head of the Ribeiro de Santa Luzia during May of 1849.

313. **Acalles Wollastoni.**

Acalles Wollastoni, *Chevr., in Guér. Rev. de Zool.* iv. (2ième série) 279 (1852).
—— ——, *Woll., Ins. Mad.* 342 (1854).

Inhabits Madeira proper, being the smallest of the *Acalles* here

enumerated, and generally distributed throughout the sylvan districts, —at rather low, intermediate and lofty elevations.

(Subfam. 5. ERIRHINIDES.)

Genus 128. **TYCHIUS.**

(Germar) Schön., *Curc. Disp. Meth.* 245 (1826).

314. **Tychius robustus.**

Tychius robustus, *Woll., Ins. Mad.* 344 (1854).

Inhabits the entire Madeiran Group, being more especially abundant in Porto Santo,—where, at certain seasons, it teems beneath stones in low spots towards the southern coast. On the three Dezertas it is scarcer, nevertheless at times sufficiently common. But in Madeira proper it is exceedingly rare, and I have not myself hitherto observed it in that island; it would appear indeed to be confined to the São Lourenço promontory (the nearest point to both Porto Santo and the Dezertas), in which locality it has been recently discovered by Mr. Bewicke.

315. **Tychius albosquamosus.**

Tychius albosquamosus, *Woll., Ins. Mad.* 345 (1854).

Inhabits the Dezerta Grande, and is hitherto unique,—the single specimen (now in the British Museum) having been captured by myself on that island during May 1850.

316. **Tychius filirostris.**

Tychius filirostris, *Woll., Ins. Mad.* 346 (1854).

Inhabits Porto Santo; exceedingly rare. Two specimens only have as yet come beneath my notice. They were both captured, by myself, in the low calcareous district of the Zimbral d'Areia, in the east of the island,—one during April 1849, and the other in May 1855.

Genus 129. **PISSODES.**

Germar, *Ins. Spec.* 316 (1824).

317. **Pissodes notatus****.

Curculio notatus, *Fab., Mant. Ins.* i. 103 (1787).
Rhynchænus notatus, *Gyll., Ins. Suec.* iii. 69 (1813).
Pissodes notatus, *Schön., Gen. et Spec. Curc.* iii. 258 (1836).
—— ——, *Woll., Ins. Mad.* 347 (1854).

Inhabits Madeira and the Dezerta Grande,—occurring abundantly

in the pine-woods of the former, and in a small patch of fir-trees which has been planted towards the summit of the latter. The Dezertan specimens are generally of a duller and more rusty tint than those from Madeira proper.

Genus 130. **LIXUS.**

Fabricius, *Syst. Ent.* ii. 498 (1775).

318. **Lixus Cheiranthi.**

Lixus Cheiranthi, *Woll., Ins. Mad.* 349 (1854).

Inhabits Madeira proper, occurring in cultivated spots around Funchal, and attaching itself to particular plants,—especially the Wallflower (*Cheiranthus Cheiri*, Linn.) and the common Broom.

319. **Lixus Chawneri.**

Lixus Chawneri, *Woll., Ins. Mad.* 350 (1854).

Inhabits Madeira and Porto Santo, occurring in low positions near the towns, particularly where the *Arundo donax* is planted,—to which it may perhaps be attached. Rare.

320. **Lixus vectiformis.**

Lixus vectiformis, *Woll., Ins. Mad.* 351 (1854).

Inhabits Porto Santo, the only specimen which I have seen having been captured by myself on the Campo de Baixo during December 1848.

321. **Lixus angustatus.**

Curculio angustatus, *Fab., Syst. Ent.* 135 (1775).
Lixus angustatus, *Fab., Syst. Eleu.* ii. 502 (1801).
—— ——, *Schön., Gen. et Spec. Curc.* iii. 43 (1836).
—— ——, *Woll., Ins. Mad.* 351 (1854).

Inhabits Madeira proper, occurring amongst dense vegetation from about 800 to 2000 feet above the sea. It is found also in the Canary Islands.

322. **Lixus rufitarsis.**

Lixus rufitarsis, *Schön., Gen. et Spec. Curc.* iii. 78 (1836).
—— ——, *Dej., Cat. des Col.* 296 (1837).
—— ——, *Woll., Ins. Mad.* 352 (1854).
—— angustatus, *Dahl, in litt.*

Inhabits Madeira proper, occurring on thistles from about 400 to 3000 feet above the sea.

(Div. II. BRACHYRHYNCHI.)

(Subfam. 6. CYCLOMIDES.)

Genus 131. **CYPHOSCELIS.**

Wollaston, *Ins. Mad.* 356. tab. vii. f. 2 (1854).

323. **Cyphoscelis distorta.**

Cyphoscelis distorta, *Woll., Ins. Mad.* 357. tab. vii. f. 2 (1854).

Inhabits Madeira proper, occurring principally in the sylvan districts of a lofty elevation.

Genus 132. **LAPAROCERUS.**

Schönherr, *Gen. et Spec. Curc.* ii. 530 (1834).

324. **Laparocerus morio.**

Laparocerus morio, *Schön., Gen. et Spec. Curc.* 531 (1834).
—— ——, *Woll., Ins. Mad.* 360. tab. vii. f. 1 (1854).

Inhabits every island of the Madeiran Group, abounding at all altitudes.

Genus 133. **ATLANTIS.**

Wollaston, *Ins. Mad.* 361. tab. vii. f. 3, 4, 5, 6 (1854).

325. **Atlantis clavatus.**

Atlantis clavatus, *Woll., Ins. Mad.* 363. tab. vii. f. 3 (1854).

Inhabits Madeira proper, the single example which has come beneath my notice having been taken by myself on the elevated plain of the Fateiras during the spring of 1848.

326. **Atlantis lamellipes.**

Atlantis lamellipes, *Woll., Ins. Mad.* 364. tab. vii. f. 5 (1854).

Inhabits Madeira proper, attaining its maximum towards the upper limits of the sylvan districts.

327. **Atlantis calcatrix.**

Atlantis calcatrix, *Woll., Ins. Mad.* 366 (1854).

Inhabits Madeira proper, occurring in similar places as the last species. Rare.

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328. Atlantis noctivagans.

Atlantis noctivagans, *Woll., Ins. Mad.* 367 (1854).
—— lauripotens et australis, *Woll., Ins. Mad.* 369, 370 (1854).

Inhabits Madeira proper, occurring on the foliage of the native laurels at nearly all elevations. It is an exceedingly variable insect, not only in its colour and size, but likewise, to a certain extent, even in the development of the inner heel of its hinder male tibiæ,—which is usually rather more produced and acute in the specimens from a higher altitude than in those from the lower ones. It was on this account that I was induced to form two more species out of it than I now believe can be legitimately maintained, and which I have consequently suppressed. At the same time I would not wish to imply for certain that a second species may not be indicated in the less elevated districts; and should such be eventually ascertained to be the case, it will be referable to the *A. lauripotens* of the *Insecta Maderensia*,—in which the anterior tibiæ are somewhat less rounded towards their inner base, the hinder heel less acute, and the pubescence generally finer and more dense. Still, as just stated, it is my present opinion that these small differences (which I believe shade-off into each other) are the result of the mere local influences of the various elevations in which the creature obtains, and cannot be made use of for real specific characters. The *A. noctivagans* (as now enunciated) may be said, therefore, to attain its maximum (like the *A. lamellipes*) towards the upper limits of the sylvan tracts, where it is somewhat more robust and brightly tessellated than in less elevated regions.

329. Atlantis vespertinus.

Atlantis vespertinus, *Woll., Ins. Mad.* 371. tab. vii. f. 4 (1854).

Inhabits Madeira proper, abounding beneath stones on the open grassy slopes of the highest elevations.

330. Atlantis lanatus.

Atlantis lanatus, *Woll., Ins. Mad.* 372. tab. vii. f. 6 (1854).

Inhabits Madeira proper, occurring principally towards the lower limits of the sylvan districts.

331. Atlantis navicularis.

Atlantis navicularis, *Woll., Ins. Mad.* 374 (1854).

Inhabits Porto Santo, occurring for the most part about the sand-hills behind the southern beach.

332. **Atlantis inconstans.**

Atlantis inconstans, *Woll., Ins. Mad.* 375 (1854).

Inhabits Porto Santo, occurring in similar places as the last species.

333. **Atlantis mendax.**

Atlantis mendax, *Woll., Ins. Mad.* 376 (1854).

Inhabits Porto Santo, being tolerably common about the roots of plants on the sand-hills.

334. **Atlantis instabilis.**

Atlantis instabilis, *Woll., Ins. Mad.* 377 (1854).

Inhabits Porto Santo, being found principally, beneath stones, on the rocky slopes and headlands at a rather higher elevation than the three preceding species.

335. **Atlantis excelsus.**

Atlantis excelsus, *Woll., Ins. Mad.* 378 (1854).

Inhabits Madeira proper, abounding throughout the sylvan regions (especially towards the north of the island), and being occasionally found in open grassy spots beyond them.

336. **Atlantis Schaumii.**

Atlantis Schaumii, *Woll., Ins. Mad.* 379 (1854).
—— Foræ, *Woll., Ins. Mad.* 380 (1854).

Inhabits Madeira and Porto Santo,—occurring in the former (so far as has been hitherto observed) only on the Ponta São Lourenço and (its detached extremity) the Ilheo de Fora; and in the latter on the summit of the Pico do Castello, where it abounds beneath stones.

Genus 134. **OMIAS.**

(Germar) Schön., *Curc. Disp. Meth.* 190 (1826).

337. **Omias ventrosus.**

Omias ventrosus, *Woll., Ins. Mad.* 382 (1854).

Inhabits the mountains of Madeira proper, occurring beneath stones on the open grassy slopes.

338. **Omias ænescens.**

Omias ænescens, *Woll., Ins. Mad.* 383 (1854).

Inhabits Madeira proper, occurring in company with the last species, but much more rarely. This species approaches very closely to

the smaller and more ovate specimens of the preceding one (which have, moreover, occasionally, a slightly ænescent tinge); still, I believe that it is truly distinct therefrom,—its somewhat more rounded shoulders and cylindrical prothorax, in conjunction with the much longer, denser, softer, and more erect additional pile with which it is beset, giving it a character which, when once seen, can scarcely be mistaken.

339. **Omias angustulus,** n. sp.

O. elongato-ovatus angustulus antice subacuminatus, pube cinereâ robustâ depressâ tectus, prothorace profunde punctato, elytris punctato-striatis, pilis superadditis fere carentibus, antennis pedibusque fusco-ferrugineis.
Long. corp. lin. 2–2¼.

O. elongate-ovate, rather narrow, somewhat acuminated anteriorly and rounded behind, brownish- or piceous-black, and densely clothed with a robust, decumbent, ashy or cinereous pubescence. *Rostrum* roughly punctured, and rather more narrowed at its apex than in either of the preceding species, and with the *eyes* perhaps a little less prominent. *Prothorax* deeply punctured; with the sides rounded; and widest behind the middle. *Elytra* less convex than in either of the foregoing species, also narrower and with the sides straighter, the broadest part being more strictly *behind* the middle; punctate-striated; almost free from any indication of longer additional hairs; and apparently only obscurely tessellated. *Antennæ* and *legs* brownish-ferruginous, the *former* being the clearer of the two.

The insect from which the above description has been drawn out it is impossible to identify with either of the preceding species,—possessing as it does peculiarities of outline and surface which can scarcely be the result of any combination of the local influences to which it may have been exposed. Two specimens only have hitherto come beneath my notice,—one detected by myself, and the other (more recently) by Mr. Bewicke, on the mountains above Funchal.

340. **Omias Waterhousei.**

Omias Waterhousei, *Woll., Ins. Mad.* 384. tab. vii. f. 8 (1854).

Inhabits Madeira and the Dezerta Grande, occurring beneath stones at intermediate elevations.

Genus 135. **ANEMOPHILUS.**

Wollaston, *Ins. Mad.* 385. tab. vii. f. 7, 9 (1854).

341. Anemophilus crassus.

Anemophilus crassus, *Woll., Ins. Mad.* 386. tab. vii. f. 7 (1854).

Inhabits the mountains of Porto Santo,—occurring beneath stones, and amongst lichen in the crevices of the weather-beaten rocks.

342. Anemophilus subtessellatus.

Anemophilus subtessellatus, *Woll., Ins. Mad.* 387 (1854).

Inhabits Porto Santo, in company with the last species.

343. Anemophilus trossulus.

Anemophilus trossulus, *Woll., Ins. Mad.* 388. tab. vii. f. 9 (1854).

Inhabits Porto Santo, occurring beneath stones in exposed calcareous spots of a low elevation.

Genus 136. LICHENOPHAGUS.

Wollaston, *Ins. Mad.* 389. tab. viii. f. 1, 3 (1854).

344. Lichenophagus fritillus.

Lichenophagus fritillus, *Woll., Ins. Mad.* 390. tab. viii. f. 1 (1854).

Inhabits the mountains of Porto Santo, occurring amongst lichen in the fissures of the rocks.

345. Lichenophagus acuminatus.

Lichenophagus acuminatus, *Woll., Ins. Mad.* 391. tab. viii. f. 3 (1854).

Inhabits the Dezerta Grande, occurring beneath stones on the high ridge at the extreme north of the island. It may possibly be but an insular form of the *L. fritillus*; nevertheless since the *setoseness* of its surface and its darker hue remain quite constant on the Dezerta Grande, we have scarcely evidence enough perhaps to render its amalgamation with the preceding species desirable.

Genus 137. SCOLIOCERUS.

Wollaston, *Ins. Mad.* 391. tab. viii. f. 2 (1854).

346. Scoliocerus Maderæ.

Scoliocerus Maderæ, *Woll., Ins. Mad.* 392. tab. viii. f. 2 (1854).

Inhabits Madeira proper, occurring beneath stones on the open grassy slopes at rather low and intermediate altitudes. Rare.

347. Scoliocerus curvipes.

Scoliocerus curvipes, *Woll., Ins. Mad.* 393 (1854).

Inhabits Madeira proper, occurring in similar places as the last species, but generally at a higher elevation.

Genus 138. TRACHYPHLŒUS.

Germar, *Ins. Spec.* i. 403 (1824).

348. Trachyphlœus scaber.

Curculio scaber, *Linn., Fna Suec.* 176 (1761).
—— scabriculus, *Gyll., Ins. Suec.* iii. 309 (1813).
Trachyphlœus scaber, *Schön., Gen. et Spec. Curc.* ii. 490 (1834).
—— ——, *Woll., Ins. Mad.* 394 (1854).

Inhabits Madeira proper, at intermediate elevations: common.

(Subfam. 7. BYRSOPSIDES.)

Genus 139. ECHINOSOMA.

Wollaston, *Ins. Mad.* 395. tab. viii. f. 5 (1854).

349. Echinosoma porcellus.

Echinosoma porcellus, *Woll., Ins. Mad.* 396. tab. viii. f. 5 (1854).

Inhabits the damp sylvan districts of Madeira proper, occurring beneath stones and logs of wood at intermediate elevations. Rare.

(Subfam. 8. MOLYTIDES.)

Genus 140. HYPERA.

Germar, *Mag. der Ent.* iv. 335 (1821).

350. Hypera lunata.

Hypera lunata, *Woll., Ins. Mad.* 398 (1854).

Inhabits Madeira, Porto Santo, and the Dezerta Grande,—occurring beneath stones, generally at rather low elevations.

351. Hypera murina*.

Curculio murinus, *Fab., Ent. Syst.* i. ii. 463 (1792).
Hypera murina, *Germ., Mag. der Ent.* iv. 341 (1821).
Phytonomus murinus, *Schön., Gen. et Spec. Curc.* ii. 383 (1834).
Hypera murina, *Woll., Ins. Mad.* 399 (1854).

Inhabits Madeira, Porto Santo, and the Dezerta Grande, occurring

in similar spots as the *H. lunata*. I am by no means satisfied that it is distinct from the following species; nevertheless, since I believe it to be correctly identified with the *H. murina* as generally acknowledged throughout Europe, I have kept it separate.

352. **Hypera variabilis***.

Curculio variabilis, *Herbst, Käf.* vi. 263. tab. 80. f. 1 (1795).
—— bimaculatus, *Mshm, Ent. Brit.* i. 266 (1802).
Phytonomus variabilis, *Schön., Gen. et Spec. Curc.* ii. 384 (1834).
Hypera variabilis, *Woll., Ins. Mad.* 400 (1854).

Inhabits Madeira, Porto Santo, the Dezerta Grande, and the Southern Dezerta, occurring with the last species.

(Subfam. 9. CLEONIDES.)

Genus 141. **CLEONUS.**

Schönherr, *Curc. Disp. Meth.* 145 (1826).

353. **Cleonus plicàtus.**

Curculio plicatus, *Oliv., Ent.* v. 82. 322. pl. 6. f. 65 (1807).
Rhytideres plicatus, *Schön., Curc. Disp. Meth.* 150 (1826).
Cleonus plicatus, *Schön., Gen. et Spec. Curc.* ii. 203 (1834).
—— ——, *Woll., Ins. Mad.* 401 (1854).

Inhabits Madeira, Porto Santo, and the Dezerta Grande,—occurring amongst stones, and in the crevices of the rocks, generally at rather low elevations. It is found also in the Canary Islands.

(Subfam. 10. BRACHYDERIDES.)

Genus 142. **SITONA.**

Germar, *Ins. Spec.* i. 414 (1824).

354. **Sitona gressoria.**

Curculio gressorius, *Fab., Ent. Syst.* i. ii. 465 (1792).
Sitona gressorius, *Germ., Ins. Spec.* i. 416 (1824).
—— ——, *Schön., Gen. et Spec. Curc.* ii. 97 (1834).
—— gressoria, *Woll., Ins. Mad.* 403 (1854).

Inhabits Madeira proper, occurring within the inhabited districts. It is recorded also in the Canarian Group.

355. **Sitona latipennis.**

Sitona latipennis, *Schön., Gen. et Spec. Curc.* ii. 99 (1834).
—— ——, *Woll., Ins. Mad.* 404 (1854).

Inhabits Madeira proper, occurring on the common Broom (*Genista scoparia*, Linn.) at intermediate and lofty elevations.

356. Sitona cambrica.

Sitona cambrica (*Kby*), *Steph., Ill. Brit. Ent.* iv. 140 (1831).
—— cribricollis, *Schön., Gen. et Spec. Curc.* ii. 101 (1834).
—— cambrica, *Woll., Ins. Mad.* 405 (1854).

Inhabits Madeira and Porto Santo, abounding in low arid spots near the coast.

357. Sitona lineata*.

Curculio lineatus, *Linn., Fna Suec.* 183 (1761).
Sitona lineata, *Steph., Ill. Brit. Ent.* iv. 135 (1831).
—— lineatus, *Schön., Gen. et Spec. Curc.* ii. 109 (1834).
—— lineata, *Woll., Ins. Mad.* 406 (1854).

Inhabits Madeira and Porto Santo, principally at low elevations. It occurs also in the Canary Islands.

358. Sitona humeralis*.

Sitona humeralis (*Kby*), *Steph., Ill. Brit. Ent.* iv. 138 (1831).
—— promptus, *Schön., Gen. et Spec. Curc.* ii. 113 (1834).
Sitones promptus, *Redt., Fna Austr.* 451 (1849).
Sitona humeralis, *Woll., Ins. Mad.* 407 (1854).

Inhabits Madeira and Porto Santo, occurring in similar places as the last species, but more rarely.

Fam. 36. ATTELABIDÆ.

Genus 143. **APION.**

Herbst, *Käf.* vii. 100 (1797).

359. Apion vernale.

Attelabus vernalis, *Fab., Ent. Syst.* i. ii. 392 (1792).
Curculio concinnus, *Mshm, Ent. Brit.* i. 248 (1802).
Apion vernale, *Schön., Gen. et Spec. Curc.* i. 273 (1833).
—— ——, *Woll., Ins. Mad.* 409 (1854).

Inhabits Madeira proper, principally at rather low elevations.

360. Apion delicatulum, n. sp.

A. gracile fusco-piceum squamis albidis, fusco-albidis et subnigrescentibus læte variegatum, rostro longiusculo arcuato tereti, prothorace rugose granulato sed vix punctato, elytris elongato-ovatis crenato-striatis, ad apicem fere integris, fasciâ postmediâ magnâ arcuatâ communi albidâ ornatis, antennis ferrugineis, pedibus diluto-testaceis, femoribus infuscatis.
Long. corp. lin. $\frac{7}{8}$-$1\frac{1}{3}$.

A. of the same colour and aspect as the *A. vernale*, but slenderer and rather smaller. *Rostrum* longer, narrower, and more arcuated

than in that insect; of the same breadth throughout (*not* being thickened, as there, at its extreme base); and with the antennæ inserted considerably further from the eyes; free from the deep and remote punctures which are so evident towards the base in (both sexes of) that species; and also much less shining,—appearing finely granulated beneath the microscope: the *forehead*, however (between the eyes), deeply and distinctly punctured. *Prothoraæ* and *elytra* as in the *A. vernale*; except that the *former* is almost entirely free from the punctures which are there so evident, is more coarsely granulated, and is perhaps a little less sinuated behind; whilst the *latter* are somewhat more ovate, and have only an obscure *tendency* to the peculiar formation at the extreme apex which is there so remarkable. *Antennæ* ferruginous. *Legs* diluted testaceous, being less pale than those of the *A. vernale*, and with the *femora* (especially the four hinder ones) more or less darkly infuscated.

The present *Apion* might be supposed at first sight to be a small and slender variety of the *A. vernale*. It may, however, be at once known from that insect (as well as from the allied species the *A. pallidulum* from Sicily, and the *rufescens* from Portugal,—which appear to me to be mere geographical states of the *vernale*) by, *inter alia*, its much longer, more arcuated, and basally-narrower rostrum, and by its antennæ being inserted at a greater distance from the eyes. It was detected by myself in the Boa Ventura and the Ribeiro de São Jorge (in the north of Madeira proper) during August 1855.

361. Apion sagittiferum.

Apion sagittiferum, *Woll., Ins. Mad.* 410 (1854).

Inhabits Madeira, Porto Santo, and the Dezerta Grande,—occurring in grassy and cultivated places, as well as amongst lichen in the crevices of the rocks, at rather low and intermediate altitudes.

362. Apion Malvæ.

Curculio Malvæ, *Fab., Syst. Ent.* 132 (1775).
Apion Malvæ, *Schön., Gen. et Spec. Curc.* i. 272 (1833).
—— ——, *Redt., Fna Austr.* 462 (1849).
—— ——, *Woll., Ins. Mad.* 411 (1854).

Inhabits Madeira proper, occurring on Mallows within the cultivated districts.

363. Apion frumentarium.

Curculio frumentarius, *Linn., Fna Suec.* 175 (1761).
Apion hæmatodes, *Steph., Ill. Brit. Ent.* iv. 174 (1831).
—— frumentarium, *Schön., Gen. et Spec. Curc.* i. 283 (1833).
—— ——, *Woll., Ins. Mad.* 412 (1854).

Inhabits Madeira and Porto Santo, occurring principally within the cultivated districts.

364. **Apion chalybeipenne.**

Apion chalybeipenne, *Schön., in litt.* (teste *Dom. Bohemann*).
—— ——, *Woll., Ins. Mad.* 413 (1854).

Inhabits Madeira, Porto Santo, and the Dezerta Grande, occurring (generally on Mallows) at intermediate elevations.

365. **Apion Wollastoni.**

Apion Wollastoni, *Chevr., in Guér. Rev. de Zool.* iv. (2ième série) 278 (1852).
—— ——, *Woll., Ins. Mad.* 414. tab. viii. f. 4 (1854).

Inhabits Madeira proper (especially towards the north of the island), occurring principally on a species of *Vicia* at rather low and intermediate altitudes.

366. **Apion rotundipenne.**

Apion rotundipenne, *Woll., Ins. Mad.* 415. tab. viii. f. 6 (1854).

Inhabits Madeira, Porto Santo, and the Dezerta Grande, occurring likewise on a *Vicia* at intermediate altitudes,—but generally in drier spots than the *A. Wollastoni*.

Genus 144. **AULETES.**

Schönherr, *Curc. Disp. Meth.* 46 (1826).

367. **Auletes Maderensis.**

Auletes Maderensis, *Woll., Ins. Mad.* 416. tab. viii. f. 7 (1854).

Inhabits Madeira proper, at intermediate elevations,—occurring principally in the north of the island.

Fam. 37. BRUCHIDÆ.

(Subfam. 1. ANTHRIBIDES.)

Genus 145. **XENORCHESTES.**

Wollaston, *Ins. Mad.* 417. tab. viii. f. 8 (1854).

368. **Xenorchestes saltitans.**

Xenorchestes saltitans, *Woll., Ins. Mad.* 418. tab. viii. f. 8 (1854).

Inhabits the sylvan districts of Madeira proper, occurring beneath the loosened bark of trees in damp spots, generally of a lofty elevation. Rare.

(Subfam. 2. BRUCHIDES.)

Genus 146. **BRUCHUS.**

Geoffroy, *Hist. Abr. des Ins. de Paris*, i. 163 (1762).

369. **Bruchus rufimanus****.

Bruchus granarius, *Mshm*, [nec *Linn.* 1767] *Ent. Brit.* i. 235 (1802).
—— —— et Pisi, *Steph., Ill. Brit. Ent.* iv. 213 (1831).
—— rufimanus, *Schön., Gen. et Spec. Curc.* i. 58 (1833).
—— ——, *Woll., Ins. Mad.* 419 (1854).

Inhabits Madeira proper, occurring sparingly within the cultivated districts,—principally near the towns: probably imported. It is found also in the Canary Islands.

370. **Bruchus subellipticus***.

Bruchus subellipticus, *Woll., Ins. Mad.* 420 (1854).

Inhabits Madeira proper, occurring in similar places as the last species, but more rarely. It has been taken amongst dried beans by Mr. M. Park.

371. **Bruchus lichenicola.**

Bruchus lichenicola, *Woll., Ins. Mad.* 421. tab. viii. f. 9 (1854).

Inhabits Porto Santo and the two Northern Dezertas, abounding amongst lichen in the fissures of the rocks.

Sectio VIII. EUCERATA.

Fam. 38. CERAMBICIDÆ.

Genus 147. **STROMATIUM.**

Serville, *Ann. de la Soc. Ent. de France*, iii. (1re série) 80 (1834).

372. **Stromatium unicolor****.

Callidium unicolor, *Oliv., Ent.* iv. 70. 58. pl. 7. f. 84 (1795).
—— strepens, *Fab., Ent. Syst.* v. *Suppl.* 150 (1798).
Stromatium strepens, *Lucas, Col. de l'Algérie*, 490 (1849).
—— unicolor, *Woll., Ins. Mad.* 423 (1854).

Inhabits Madeira proper, occurring in houses in and around Funchal.

Genus 148. **CRIOCEPHALUS.**

Mulsant, *Longic. de France*, 63 (1840).

In its general outline, and minutely pubescent surface, as well as

in its compressed, unclavated femora, *Criocephalus* agrees with *Stromatium*; nevertheless its antennæ (especially of the females) are shorter than in that genus, its prothorax is rounder, and its eyes are very much less emarginated at their inner edge,—being in fact reniform. Its maxillary lobes also are much more slightly developed, the internal one being short and rudimentary.

373. Criocephalus rusticus**.

C. fusco-niger vel fuscus opacus creberrime et subtiliter pubescens, prothorace rotundato inæquali dense punctulato, elytris subtilissime et crebre rugulosis, singulo striis duabus distinctis longitudinaliter instructo.

Long. corp. lin. 6–12.

Cerambyx rusticus, *Linn., Fna Suec.* 492 (1746).
Callidium rusticum, *Steph., Ill. Brit. Ent.* iv. 246 (1831).
Criocephalus rusticus, *Muls., Longic. de France*, 63 (1840).
—— ——, *Lucas, Col. de l'Algérie*, 490 (1849).

C. large, linear, brownish-black (occasionally entirely rusty-brown), opake, and densely clothed all over with a very short, fine, decumbent, dark pubescence. *Antennæ* rather short in the female sex, long in the male. *Head* and *prothorax* very closely and finely punctulated: the *former* with a deeply impressed longitudinal line between the antennæ: the *latter* suborbicular, being much rounded at the sides; and with its surface unequal. *Elytra* most minutely and densely rugulose (scarcely punctured) all over; with two distinct longitudinal striæ down each, and the rudiments of a third towards either outer margin. *Limbs* nearly concolorous with the rest of the surface.

The present insect, which ranges over a large portion of Europe, and which is found also in the north of Africa and the Canary Islands, was first detected in Madeira, by myself, in September 1855, —when I met with several specimens between the loosened chippings of fir-trees in a plantation belonging to Mr. Bean at Camacha. In the following month of the same year, however, it was taken abundantly by Mr. Bewicke, in a similar position, in the same parish, —though at a somewhat higher elevation; and it is probably to be met with throughout the entire district, towards the south and east of the island, in which the pine woods have of late years been so extensively planted.

Genus 149. HYLOTRUPES.

Serville, *Ann. de la Soc. Ent. de France*, iii. 77 (1834).

Hylotrupes agrees with *Phymatodes* in the abrupt clavation of its femora; nevertheless its antennæ are shorter (with their third joint

considerably longer than the fourth), and its coxæ (especially the four anterior ones) are placed further apart from each other,—the mesosternum being broad and emarginated behind (between the intermediate legs), whereas in that genus it is narrow and reduced to a point. Its prothorax is armed on each side of the disk with a large and glabrous tubercle, and its elytra are somewhat separately rounded-off at their respective apices.

374. Hylotrupes Bajulus**.

H. depressus niger subnitidus parce cinereo-pilosus, prothorace lato rotundato in disco tuberculis duobus glabris instructo, elytris rugosis, mox ante medium fasciâ dorsali transversâ cinereâ plus minus obsoletâ ornatis.
Variat (immaturus) elytris lurido-testaceis.
Long. corp. lin. 7–8.

Cerambyx Bajulus, *Linn., Fna Suec.* 489 (1746).
Callidium Bajulus, *Steph., Ill. Brit. Ent.* iv. 246 (1831).
Hylotrupes Bajulus, *Muls., Longic. de France*, 55 (1840).
—— ——, *Lucas, Col. de l'Algérie*, 489 (1849).

H. linear, much depressed, black, slightly shining, and sparingly beset with coarse, cinereous pubescence,—which on the prothorax is usually long, and more or less erect. *Antennæ* rather short in both sexes. *Head* and *prothorax* somewhat coarsely, but not densely, punctured: the *former* with an impressed longitudinal line between the antennæ: the *latter* rather wide, and much rounded at the sides; and with a large, glabrous, highly polished tubercle on either side of the disk. *Elytra* coarsely wrinkled, or rugulose, especially behind, but scarcely punctured; each of them somewhat rounded-off at its inner apical angle; and ornamented across the disk (just before the middle) with an obscure, interrupted fascia of cinereous pile,—which is often entirely evanescent, but generally apparent in the form of an indistinct paler patch towards the inner disk of each elytron. *Limbs* nearly concolorous with the rest of the surface.

A common European insect, and doubtless imported into Madeira. A single specimen was captured by myself in the streets of Funchal during the summer of 1855; a second has been lately communicated by Mr. Leacock; and Mr. Bewicke informs me that two or three more have been recently met with. It occurs also in the Canary Islands.

Genus 150. PHYMATODES.

Mulsant, *Longic. de France*, 47 (1840).

375. **Phymatodes variabilis***.

Cerambyx variabilis, *Linn., Fna Suec.* 669 (1761).
—— testaceus et fennicus, *id.*, 670 et 674.
Callidium fennicum, variabile, testaceum et præustum, *Fab., Ent. Syst.* i. 319, 321, 326, 327 (1792).
Phymatodes variabilis, *Muls., Longic. de France*, 47 (1840).
—— ——, *Woll., Ins. Mad.* 425 (1854).

Inhabits Madeira proper, occurring beneath loosened bark within the cultivated districts.

Genus 151. **BLABINOTUS.**

Wollaston, *Ins. Mad.* 425. tab. ix. f. 1 (1854).

376. **Blabinotus spinicollis.**

Blabinotus spinicollis, *Woll., Ins. Mad.* 426. tab. ix. f. 1 (1854).

Inhabits the sylvan districts of Madeira proper, occurring beneath the loosened bark of trees, and in rotten wood, at intermediate and lofty elevations.

377. **Blabinotus Bewickii,** n. sp.

B. subcylindricus rufo-piceus cinereo-pubescens, prothorace subæquo densissime punctulato ad latera spinâ mediâ instructo, elytris dense ruguloso-punctatis, tuberculisque obscuris remotis subglabris irroratis, oculis intus valde emarginatis.
Long. corp. lin. 6–6½.

B. narrow, linear-elongate and subcylindrical, being of the same form as the *B. spinicollis*; but of a much paler and more rufescent hue, and with a less admixture of erect additional hairs on its (finely pubescent) surface. *Eyes* larger than, and not so prominent as, those of that insect, and very much more emarginated along their inner edge. *Antennæ* as in the last species, but not quite so hirsute, and with their third joint distinctly shorter than the fourth. *Head* and *prothorax* closely punctulated: the *former* more constricted behind the eyes than in the *B. spinicollis*: the *latter* with the sides produced into a robust central tooth; its upper surface nearly even, there being no appearance of tubercles on the disk; and with its anterior margin a little thickened (but not elevated). *Limbs* of a rather clearer, or more rufescent, tint than the rest of the surface. *Anterior tarsi* broader, or more expanded, than those of the *spinicollis*, and the *hinder ones* longer,—their basal joint, especially, being more produced.

So remarkably does the present species, in external contour and aspect, assimilate the last, that I have not hesitated to refer it to the same genus; nevertheless it must be admitted, that in the construction of its eyes and feet, as well as in the comparatively shortened

third joint of its antennæ, it almost requires a separate group for its reception. It was detected beneath pine-bark at the Palheiro (in the south of Madeira proper) by Mr. Bewicke, during February 1856; and two more specimens have been lately communicated to me by Mr. Mason. I have named it after its discoverer,—to whose indefatigable researches we are indebted for so many additions to the fauna of these islands.

Genus 152. **HESPEROPHANES.**

Mulsant, *Longic. de France*, 66 (1840).
Trichoferus, *Woll., Ins. Mad.* 427. tab. ix. f. 3 (1854).

An examination of additional specimens of the insect which I described, in 1854, under the name of *Trichoferus senex*, has convinced me that they are referable to *Hesperophanes* of Mulsant. As a genus, *Trichoferus*, therefore, must be suppressed.

378. **Hesperophanes senex.**

Trichoferus senex, *Woll., Ins. Mad.* 428. tab. ix. f. 3 (1854).

Inhabits Madeira proper, occurring in rotten wood, principally at low elevations. Rare.

Genus 153. **CLYTUS.**

Fabricius, *Syst. Eleu.* ii. 345 (1801).

379. **Clytus Arietis****.**

Leptura Arietis, *Linn., Fna Suec.* 695 (1761).
Clytus Arietis, *Fab., Syst. Eleu.* ii. 347 (1801).
—— ——, *Steph., Ill. Brit. Ent.* iv. 243 (1831).
—— ——, *Woll., Ins. Mad.* 429 (1854).

Inhabits Madeira proper, and doubtless imported into the island,—the only specimen which I have hitherto seen having been collected by the late Dr. Heineken.

Genus 154. **DEUCALION.**

Wollaston, *Ins. Mad.* 430. tab. ix. f. 2 (1854).

380. **Deucalion Desertarum.**

Deucalion Desertarum, *Woll., Ins. Mad.* 434. tab. ix. f. 2 (1854).

Inhabits the two Southern Dezertas, occurring beneath stones and in the crevices of the rocks on the extreme summits of the islands. Very rare.

Genus 155. POGONOCHERUS.

(Megerle) Steph., *Ill. Brit. Ent.* iv. 233 (1831).

The present genus, which is an addition to our fauna since the publication of the *Insecta Maderensia*, contains the smallest Longicorn as yet detected in these islands. It may be readily known by its tuberculose and laterally spined prothorax (in which respect it resembles *Blabinotus*), by its deflexed head, annulated antennæ (which are ciliated with long hairs beneath), and by its posteriorly acuminated elytra,—which are curiously truncated, and spined, at their hinder apex. The species are for the most part prettily variegated with dark and light pile,—the former being often disposed longitudinally, in tufts.

381. Pogonocherus hispidus**.

P. fusco-brunneus pubescenti-variegatus, prothorace inæquali tuberculato ad latera spinâ mediâ instructo, elytris ob-triangularibus apice truncatis quatuor-spinosis, antice late albo-pubescentibus, postice nigro-fasciculatis.
Long. corp. lin. $3\frac{1}{3}$.

Cerambyx hispidus, *Linn.*, *Fna Suec.* 484 (1761).
Lamia hispida, *Gyll.*, *Ins. Suec.* iv. 66 (1827).
Pogonocherus hispidus, *Steph.*, *Ill. Brit. Ent.* iv. 234 (1831).
—— ——, *Muls.*, *Longic. de France*, 159 (1840).

P. more or less brown, and variegated with dense decumbent pile. *Eyes* greatly emarginated internally. *Antennæ* as long as (or a little longer than) the entire insect, and furnished with long hairs beneath; the joints more or less ringed with white pubescence at the base of each,—the apical portion of them being darker. *Prothorax* with the sides produced into a robust central tooth; its upper surface uneven, and with a tubercular glabrous prominence on either side of the disk. *Elytra* ob-triangular (being broad at the base, and gradually acuminated posteriorly), and truncated at their extreme apex,—the outer apical angle of each being produced into an acute spine, and the inner one less so; with a greatly raised longitudinal line (and the rudiments of one or two more) down each; the anterior half densely clothed with snowy-white pubescence (except at the extreme base, where it is olivaceous), and the hinder half ornamented with a longitudinal row of darker fascicles, on each. *Legs* variegated.

An abundant insect throughout Europe, and probably introduced into these islands,—from whence I have lately received a pair, which were detected by Mr. Mason in Madeira proper (I believe near Funchal). They differ in no respect from the specimens of more northern latitudes.

Sectio IX. PHYTOPHAGA.

Fam. 39. CRIOCERIDÆ.

Genus 156. **LEMA.**

Fabricius, *Ent. Syst.* v. *Suppl.* 90 (1798).

382. **Lema melanopa.**

Chrysomela melanopa, *Linn.*, *Fna Suec.* 573 (1761).
Lema melanopa, *Fab.*, *Ent. Syst.* v. *Suppl.* 93 (1798).
—— ——, *Lacord.*, *Mon. des Phytoph.* i. 393 (1845).
—— ——, *Woll.*, *Ins. Mad.* 436 (1854).

Inhabits Madeira, Porto Santo, and the Dezerta Grande, occurring at low and intermediate altitudes. It is found also in the Canary Islands.

Genus 157. **CRIOCERIS.**

Geoffroy, *Ins. des Env. de Paris*, i. 237 (1764).

383. **Crioceris Asparagi*.**

Chrysomela Asparagi, *Linn.*, *Fna Suec.* 567 (1761).
Crioceris Asparagi, *Fab.*, *Ent. Syst.* i. ii. 10 (1792).
—— ——, *Lacord.*, *Mon. des Phytoph.* i. 590 (1845).
—— ——, *Woll.*, *Ins. Mad.* 437 (1854).

Inhabits Madeira proper, occurring (rarely) in and around Funchal; doubtless introduced.

Fam. 40. CASSIDIDÆ.

Genus 158. **CASSIDA.**

Linnæus, *Syst. Nat.* i. (1735).

384. **Cassida nebulosa*.**

Cassida nebulosa, *Linn.*, *Fna Suec.* 468 (1761).
—— —— et affinis, *Fab.*, *Ent. Syst.* i. 293 (1792).
—— ——, *Steph.*, *Ill. Brit. Ent.* iv. 367 (1831).
—— ——, *Woll.*, *Ins. Mad.* 439 (1854).

Inhabits Madeira proper, the only specimen as yet detected (and which is now in the British Museum) having been taken near Funchal by the late Dr. Heineken.

385. Cassida hemisphærica.

Cassida hemisphærica, *Hbst, Käf.* viii. 226 (1799).
—— ——, *Gyll., Ins. Suec.* iv. 645 (1827).
—— ——, *Lucas, Col. de l'Algérie*, 514 (1849).
—— ——, *Woll., Ins. Mad.* 440 (1854).

Inhabits Madeira proper, the only specimen I have seen (which has been examined by M. Bohemann of Stockholm, and is now in the collection of the British Museum) having been captured by myself at the head of the Ribeiro de S^{ta} Luzia in 1849. The species is recorded also, by MM. Webb and Berthelot, in the Canary Islands.

386. Cassida Rossii, n. sp.

C. brevis ovato-rotundata pallida subviridescenti-flava, capite nigro, prothorace remote et minutissime punctulato subinæquali, margine antico leviter undulato, angulis posticis acutis, elytris paulo distinctius punctatis, basin versus latis.
Long. corp. lin. vix $2\frac{1}{2}$.

C. almost of the same size and aspect as the *C. hemisphærica*, but somewhat more glossy, and of a paler and yellower hue,—the *head alone* (unless indeed the specimen from which this description is compiled be immature) *being black*; also broader about the humeral region than that insect,—the widest part being more towards the *base* of the elytra (which causes the general outline to be rounder and less elliptical, or more *ob*-ovate). *Prothorax* much more finely and remotely punctulated than in the *C. hemisphærica*, and (as just intimated) proportionably broader behind; also rather more uneven, there being a slight depression on the hinder disk (in front of the scutellum); and with its anterior margin more waved in its outline (or less regularly rounded),—causing the portion overtopping the head to be just perceptibly acuminated. *Elytra* more distinctly and closely punctured than the prothorax (but less coarsely and less densely so than in the *C. hemisphærica*), wider anteriorly than the preceding species,—being also somewhat straighter about the shoulders, which is *almost* the widest part. *Limbs* as in that insect.

The discovery of this interesting addition to our fauna is due to John J. Ross, Es^{q}., who captured a single specimen from amongst long grass, near the Quinta known (by the English residents) as "the Deanery," on the northern outskirts of Funchal. It is nearly allied to the *C. hemisphærica*, but certainly distinct therefrom (as will be readily gathered by a reference to the above comparative diagnosis); and, since I have not been able to identify it with any recognized species, I have named it after its captor,—by whom it has been presented to the British Museum collection.

Fam. 41. GALERUCIDÆ.

Genus 159. HALTICA.

Geoffroy, *Hist. Abr. des Ins. de Paris*, i. 244 [script. *Altica*] (1762).

387. Haltica subtilis*.

Haltica subtilis, *Woll., Ins. Mad.* 441 (1854).

Inhabits Madeira, Porto Santo, and the Dezerta Grande, occurring generally at a low elevation, and in cultivated spots.

388. Haltica Salicariæ.

Galeruca Salicariæ, *Payk., Fna Suec.* iii. 453 (1800).
Haltica Salicariæ, *Gyll., Ins. Suec.* iii. 554 (1813).
—— ——, *Steph., Ill. Brit. Ent.* iv. 303 (1831).
—— ——, *Woll., Ins. Mad.* 442 (1854).

Inhabits Madeira and Porto Santo, at low elevations,—being rare in the former island, but common in the latter.

Genus 160. LONGITARSUS.

Latreille, *Fam. Nat. des Ins.* 405 [script. *Longitarse*] (1825).

389. Longitarsus Masoni.

Longitarsus Isoplexidis†, *Woll., Ins. Mad.* 443. tab. ix. f. 4 (1854).

Inhabits Madeira proper, being confined to the magnificent *Echium candicans*, Linn. fil., of intermediate and lofty elevations.

390. Longitarsus Cinerariæ.

Longitarsus Cinerariæ, *Woll., Ins. Mad.* 444. tab. ix. f. 6 (1854).

Inhabits the sylvan districts of Madeira proper, being attached to the *Cineraria aurita*, Herit. (the *Senecio Maderensis*, DeCand.) of intermediate and lofty altitudes.

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† It is for the same reason that I was compelled to alter the name of the *Meligethes Isoplexidis* (*vide supra*, p. 40) that I feel called upon, now, to change the title of this elegant *Longitarsus*. The unfortunate mistake into which I fell regarding the *plant* to which both of these insects are attached, and to which my attention has been lately called by Mr. Mason, must be my excuse for the present unavoidable alteration in their nomenclature. I have consequently dedicated the above truly indigenous, and very beautiful, species to the detector of my botanical error.

391. **Longitarsus consanguineus**, n. sp.

L. elongato-ovatus convexus nitidissimus et obsoletissime punctulatus, capite, prothorace, antennarum basi pedibusque omnibus rufo-testaceis, elytris atris, ad apicem subacuminatis pallidis.
Long. corp. lin. $1\frac{1}{3}$–$1\frac{2}{3}$.

L. closely allied to the *L. Cinerariæ*, but (on the average) a little larger and less strictly ovate,—being more produced, or acuminated, behind; also, perhaps, a little more perceptibly punctulated. *Head, prothorax, base of antennæ*, and *all the legs* rufo-testaceous,—the feet alone, together with the apical portion of the antennæ, being infuscated. *Elytra* deep black, except the hinder region, which is more or less pale-testaceous, and is more acuminated than in the *L. Cinerariæ*. *Body beneath* rufo-testaceous, the meso- and meta-sterna and the base of the abdomen being more or less clouded, or dusky.

Whether the present insect be more than an extreme modification of the *L. Cinerariæ*, I will not undertake to pronounce for certain; nevertheless since it is so conspicuously distinguished *primâ facie* by its somewhat more posteriorly-acuminated outline and the pale apex of its elytra, as well as by *all* its legs, and the whole of its under-surface, being more or less brightly testaceous, I think we have scarcely sufficient reason (in the absence of intermediate states) for uniting it with that species; and I have therefore described it as distinct. Like it, it would seem to be attached to the flowers of the *Cineraria aurita*, from whence I first obtained specimens (on the 4th of August 1855) amongst the clusters of the plant with which the rocks of the Encumeado of São Vincente (in Madeira proper) abound: and I subsequently captured others at the Ribeiro Frio and in the Ribeiro de São Jorge.

392. **Longitarsus saltator.**

Longitarsus saltator, *Woll., Ins. Mad.* 445 (1854).

Inhabits Madeira proper, occurring in the cultivated districts towards the south of the island. Rare.

393. **Longitarsus lutescens.**

Haltica lutescens, *Gyll., Ins. Suec.* iii. 546 (1813).
Thyamis lutescens, *Steph., Ill. Brit. Ent.* iv. 310 (1831).
Longitarsus lutescens, *Redt., Fna Austr.* 533 (1849).
—— ——, *Woll., Ins. Mad.* 446 (1854).

Inhabits Madeira, Porto Santo, and the Northern Dezerta, occurring in grassy spots at intermediate and lofty elevations.

394. Longitarsus nervosus.

Longitarsus nervosus, *Woll., Ins. Mad.* 447 (1854).

Inhabits Madeira, Porto Santo, and the Dezerta Grande, occurring in similar places as the last species.

395. Longitarsus nubigena.

Longitarsus nubigena, *Woll., Ins. Mad.* 447 (1854).

Inhabits Madeira proper, at intermediate and lofty altitudes. Rare.

396. Longitarsus fractus, n. sp.

L. elongato-ovatus nitidus saturate testaceus; capite, elytrorum suturâ vittâque laterali fractâ, femoribus posticis, necnon antennis apicem versus, nigris; tibiis posticis usque ad apicem paulatim excurvatis, calcari majore armatis.
Long. corp. lin. $1\frac{2}{3}$.

L. elongate-ovate, convex, shining, and of a diluted (or unequally infuscated) testaceous hue. *Head* and *prothorax* almost impunctate: the *former* black, and with the *eyes* large. *Elytra* rather deeply punctured; and with a broad black band down the suture, which vanishes just before it reaches the apex; and another, shorter one, which is interrupted (or broken) in the middle, at the outer margin of each. *Antennæ* long, with the basal joint piceous, the sub-basal ones lurid-testaceous, and the remainder black. *Legs* lurid-testaceous, with the two hinder femora, the base of the four anterior ones, and the apices of the four anterior feet, more or less black. *Hinder tibiæ* gradually *curved outwards*, from the base to the extreme apex (causing them to be somewhat inwardly bent in their central region), and with their terminal spur much longer and more robust than in the *Longitarsi* generally.

A single example of the above very interesting *Longitarsus*, which agrees with the following one in its curved (though less robust) hinder tibiæ, and largely developed spur, but which assimilates more the *lutescens* in colouring—except that it is altogether darker, or more infuscated, and has, in addition to its *very broad* sutural band, an outer, interrupted dash at either lateral edge—was discovered by Mr. Bewicke at the Ribeiro Frio (in Madeira proper), and has been presented by him to the British Museum collection.

397. Longitarsus excurvus, n. sp.

L. oblongo-ovatus æneseenti-viridis vel subviridi-æneus nitidus ubique profunde punctatus, pedibus infuscato-testaceis, femoribus posticis antennisque piceseentibus, tibiis posticis robustis usque ad apicem paulatim excurvatis, calcari majore armatis.
Long. corp. lin. $1\frac{1}{2}$.

L. oblong-ovate, of a shining brassy-green or greenish-brass, and deeply punctured all over,—especially on the elytra. *Eyes* prominent. *Legs*, and sub-basal joints of *antennæ*, brownish-testaceous: the remainder of the antennæ, the two posterior femora, and the base of the four anterior ones darker, or more picescent. *Hinder tibiæ* robust, and very spinulose externally; gradually *curved outwards*, from the base to the extreme apex (causing them to be inwardly bent in their central region); and with their terminal spur long and robust, as in the last species.

Its metallic surface, in conjunction with the singular structure of its robust hinder tibiæ and tibial spur, will readily characterize the above interesting addition to our Catalogue. It was discovered in Porto Santo by Mr. Bewicke, who captured two specimens of it (one of which, presented by him, is now in the collection of the British Museum) during his residence in that island in December 1856.

Genus 161. **PSYLLIODES.**

Latreille, *Fam. Nat. des Ins.* 405 [script. *Psylliode*] (1825).

398. **Psylliodes chrysocephala*.**

Chrysomela chrysocephala, *Linn.*, *Fna Suec.* 535 (1761).
Haltica chrysocephala, *Gyll.*, *Ins. Suec.* iii. 568 (1813).
Macrocnema chrysocephala, *Steph.*, *Ill. Brit. Ent.* iv. 319 (1831).
Psylliodes chrysocephala, *Woll.*, *Ins. Mad.* 449 (1854).

Inhabits Madeira proper, occurring in cultivated spots, at intermediate altitudes.

399. **Psylliodes hospes*.**

Psylliodes hospes, *Woll.*, *Ins. Mad.* 449 (1854).

Inhabits Madeira, Porto Santo, and the Dezerta Grande, attaching itself for the most part to certain of the *Cruciferæ*,—generally within the cultivated districts.

400. **Psylliodes umbratilis.**

Psylliodes umbratilis, *Woll.*, *Ins. Mad.* 450 (1854).

Inhabits Madeira proper, occurring in moist grassy spots at intermediate elevations. Rare.

401. **Psylliodes vehemens.**

Psylliodes vehemens, *Woll.*, *Ins. Mad.* 451 (1854).

Inhabits Madeira, Porto Santo, and the Dezerta Grande, occurring in grassy spots at intermediate and lofty elevations.

402. **Psylliodes tarsata.**

Psylliodes tarsata, *Woll., Ins. Mad.* 452. tab. ix. f. 5 (1854).

Inhabits Madeira proper, occurring in the damp sylvan districts of intermediate altitudes,—especially towards the north of the island.

Fam. 42. CHRYSOMELIDÆ.

Genus 162. MNIOPHILOSOMA.

Wollaston, *Ins. Mad.* 453. tab. ix. f. 8 (1854).

403. **Mniophilosoma læve.**

Mniophilosoma læve, *Woll., Ins. Mad.* 454. tab. ix. f. 8 (1854).

Inhabits Madeira proper, occurring amongst moss on the trunks of trees, and beneath stones and logs of wood, principally at lofty elevations.

Genus 163. CRYPTOCEPHALUS.

Geoffroy, *Hist. Abr. des Ins. de Paris*, i. 231 (1762).

404. **Cryptocephalus crenatus.**

Cryptocephalus crenatus, *Woll., Ins. Mad.* 456 (1854).

Inhabits Madeira proper, occurring in the intermediate districts. Local.

Genus 164. CHRYSOMELA.

Linnæus, *Syst. Nat.* edit. 1 (1735).

405. **Chrysomela Fragariæ.**

Chrysomela Fragariæ, *Woll., Ins. Mad.* 458. tab. ix. f. 7 (1854).

Inhabits Madeira proper, attaching itself to certain plants (especially the *Bystropogon punctatus*, Herit., and the mountain Strawberry) within the sylvan districts. Exceedingly rare.

Genus 165. GASTROPHYSA.

(Chevrolat, *in Dej. Cat.* 1837) Redt., *Fna Austr.* 553 (1849).

406. **Gastrophysa Polygoni****.

Chrysomela Polygoni, *Linn., Fna Suec.* 520 (1761).
Phædon Polygoni, *Steph., Ill. Brit. Ent.* iv. 336 (1831).
Gastrophysa Polygoni, *Redt., Fna Austr.* 553 (1849).
—— ——, *Woll., Ins. Mad.* 459 (1854).

Inhabits Madeira proper, and is hitherto unique,—the specimen

in the British Museum, and which was probably imported into the island, being from the collection of the late Dr. Heineken.

Sectio X. PSEUDOTRIMERA.

Fam. 43. COCCINELLIDÆ.

Genus 166. COCCINELLA.

Linnæus, *Syst. Nat.* edit. 1 [script. *Coccionella*] (1735).

407. Coccinella mutabilis.

Coccinella mutabilis, *Scriba, Journ.* 183. 141 (1790).
—— læta, *Fab., Ent. Syst.* v. *Suppl.* 78 (1798).
Adonia mutabilis, *Muls., Sécuripalp. de France*, 39 (1846).
Coccinella mutabilis, *Woll., Ins. Mad.* 461 (1854).

Inhabits Madeira and Porto Santo, occurring on flowers at nearly all elevations.

408. Coccinella 7-punctata.

Coccinella 7-punctata, *Linn., Fna Suec.* 477 (1761).
—— ——, *Gyll., Ins. Suec.* iv. 163 (1827).
—— ——, *Muls., Sécuripalp. de France*, 79 (1846).
—— ——, *Woll., Ins. Mad.* 462 (1854).

Inhabits Madeira, Porto Santo, and the Dezerta Grande, being tolerably abundant at most elevations. It occurs also in the Canary Islands.

409. Coccinella 14-pustulata*.

Coccinella 14-pustulata, *Linn., Fna Suec.* 502 (1761).
—— ——, *Gyll., Ins. Suec.* iv. 156 (1827).
—— ——, *Muls., Sécuripalp. de France*, 93 (1846).
—— ——, *Woll., Ins. Mad.* 462 (1854).

Inhabits Madeira proper, the only specimen which I have seen (now in the British Museum) being from the collection of the late Dr. Heineken.

410. Coccinella testudinea.

Coccinella testudinea (*Hein.*), *Woll., Ins. Mad.* 463 (1854).

Inhabits Madeira proper, occurring principally on the leaves of the *Datura* and *Hibiscus* at low elevations.

411. Coccinella Genistæ.

Coccinella Genistæ, *Woll., Ins. Mad.* 464. tab. x. f. 5 (1854).

Inhabits Madeira proper, being attached to the *Genista scoparia*

(or common Broom) at the loftiest altitudes. It is very nearly allied, in general aspect and markings, to the *C. phalerata* (Dahl), Lucas, from Sicily and the north of Africa, and which is well figured in the magnificent work published by the French Government on the Coleoptera of Algeria; nevertheless it is truly distinct therefrom, possessing small *structural* characters (apart from sculpture, outline, and colour) which will at once separate it from that species. Thus, it is a little larger and more oblong than the *phalerata*, it is much more perceptibly punctulated, *its scutellum is very much less minute, its eyes are larger,* and *its elytra are less curved inwards* (or emarginated) *at the base.* Its legs also (except the tarsi), its head (except two triangular frontal patches), and its prothorax (except the edges, and two oblong bars, inwardly-directed from the anterior angles) are black,—whereas in that insect they are all (with the exception of six small prothoracic spots) pale; its inner elytral stripe is much more abbreviated anteriorly, and its dark sutural line is expanded into a rounded patch just behind the scutellum.

Genus 167. SCYMNUS.

Kugelann, *in Schneid. Mag.* 515 (1794).

412. Scymnus Durantæ.

Scymnus Durantæ, *Woll., Ins. Mad.* 465 (1854).

Inhabits Madeira proper, occurring on the foliage of *Duranta Plumieri* and the various species of *Hibiscus*, principally at low elevations.

413. Scymnus marginalis.

Coccinella marginalis, *Rossi, Mant. Ins.* ii. 87 (1794).
—— morio, *Fab., Syst. Eleu.* i. 380 (1801).
Scymnus marginalis, *Muls., Sécuripalp. de France,* 244 (1846).
—— ——, *Woll., Ins. Mad.* 466 (1854).

Inhabits Madeira proper, occurring on the leaves of various plants, principally at low elevations.

414. Scymnus decemplagiatus, n. sp.

S. hemisphæricus niger pilis erectis cinereis robustis obsitus, capite prothoraceque latis creberrime punctulatis, elytris profundius et subrugose punctulatis, singulo plagis quinque testaceis ornato, antennis pedibusque piceo-ferrugineis.
Long. corp. lin. 1.

S. hemispherical, black, slightly shining, and beset all over with robust, erect, pale-cinereous hairs. *Head* and *prothorax* broad,

and very closely and finely punctulated. *Elytra* rather wider at their base than the prothorax, and with the shoulders slightly prominent; much more coarsely punctured than the head and prothorax,—the punctures being more or less confluent, giving the surface a subrugulose appearance; each ornamented with five testaceous patches,—one of which (somewhat rounded) is situated considerably before the middle, midway between the suture and lateral edge; another (large and elongate) on the inner disk; a third (smaller, but likewise elongate) between the hinder disk and the lateral edge; and the remaining two (which are almost confluent) towards the apex. *Limbs* piceo-ferruginous.

Whether the present addition to our Catalogue (since the publication of the *Insecta Maderensia*) belongs to *Scymnus* proper, or to one of the closely allied groups, as defined (on somewhat slender characters) by Mulsant, I will not undertake to pronounce for certain; but its wider head and prothorax, in conjunction with the unequal breadth of the latter and elytra, at their point of union, would seem *primâ facie* to favour its separation from the normal members of the genus. Be this however as it may, it appears to be certainly new specifically. It inhabits the moist sylvan districts of Madeira proper, from whence I obtained three specimens of it during the summer of 1855,—two at S. Antonio da Serra (at the head of the Santa Cruz ravine), and the other one in the north of the island, at the Lombo dos Pecegueiros.

415. Scymnus arcuatus.

Coccinella arcuata, *Rossi, Mant. Ins.* ii. 88 (1794).
—— ——, *Schön., Syn. Ins.* i. 2. 207 (1808).
Scymnus arcuatus, *Muls., Sécuripalp. de France,* 245 (1846).
—— ——, *Woll., Ins. Mad.* 467 (1854).

Inhabits Madeira proper, abounding on the leaves of certain trees and plants at low elevations.

416. Scymnus flavopictus.

Scymnus flavopictus, *Woll., Ins. Mad.* 469. tab. x. f. 2 (1854).

Inhabits Madeira and the northern Dezerta (at low and intermediate altitudes), being rare in the former island, and common in the latter.

417. Scymnus minimus.

Coccinella minima, *Rossi, Mant. Ins.* ii. 89 (1794).
—— ——, *Gyll., Ins. Suec.* iv. 195 (1827).
Scymnus minimus, *Muls., Sécuripalp. de France,* 260 (1846).
—— ——, *Woll., Ins. Mad.* 470 (1854).

Inhabits Madeira proper, abounding on certain plants at low elevations.

418. Scymnus Limnichoides.

Scymnus Limnichoides, *Woll., Ins. Mad.* 470. tab. x. f. 3 (1854).

Inhabits Madeira and Porto Santo, in the former of which I detected it during the summer of 1855,—at the Lombo dos Pecegueiros and the Ribeiro Frio. Rare. In addition to the characters given in the *Insecta Maderensia*, to separate it from the *S. minimus*, I may mention that it has a distinctly larger scutellum than that species.

Genus 168. RHYZOBIUS.

Stephens, *Ill. Brit. Ent.* iv. 396 (1831).

419. Rhyzobius litura.

Nitidula litura, *Fab., Mant. Ins.* i. 52 (1787).
Rhyzobius litura, *Steph., Ill. Brit. Ent.* iv. 396 (1831).
Rhizobius litura, *Muls., Sécuripalp. de France*, 262 (1846).
Rhyzobius litura, *Woll., Ins. Mad.* 472 (1854).

Inhabits Madeira, Porto Santo, and the Dezerta Grande, occurring beneath stones and at the roots of grass at intermediate elevations.

420. Rhyzobius oculatissimus, n. sp.

R. niger antice et postice rufo-testaceus, pubescens et ubique densissime punctulatus, oculis e lentibus plurimis multo minutioribus [quam in *R. liturâ*] compositis, scutello majore, elytris punctis majoribus superadditis in seriebus obsoletissimis suturam versus longitudinaliter dispositis, palpis, antennis pedibusque rufo-testaceis.

Long. corp. lin. $1\frac{1}{4}$.

R. of the same form as the *R. litura*, but a little smaller, and rounder (or less acuminated) behind; also somewhat less convex, and very much more densely and minutely punctulated all over; black, with the head, the anterior and lateral edges of the prothorax, and the apical region of the elytra, rufo-testaceous; pubescent; and slightly shining. *Head* and *prothorax* more closely and finely punctured than the elytra: the *former* with the *eyes* very differently constructed from those of the *R. litura*, being composed (like the eyes of most insects) of an innumerable number of very minute facets (instead of only a few, coarse, and convex ones, as in that insect): the *latter* a little more emarginated in front than in the *R. litura*. *Scutellum* rather larger, and more strictly escutcheon-shaped, than in the common species; also more highly polished, and free (even beneath the microscope) from sculpture. *Elytra* more coarsely punctured than the rest of the surface, and (like the prothorax) much more densely so than in the *R. litura*; the punctures moreover being composed of a double series, large and small,

—the larger ones having a tendency to arrange themselves in longitudinal rows towards the suture and base. *Antennæ, palpi,* and *legs* rufo-testaceous.

The present very distinct and interesting *Rhyzobius* was discovered in Madeira proper by Mr. Bewicke; and it is with great pleasure that I am enabled to add another well-defined representative to that small (though widely distributed) genus. Opposite as it is in hue from its common European ally, I should nevertheless have regarded the colour (however anomalous) as totally insufficient *of itself* to erect a species upon,—and especially so since that of the *R. litura* passes (as is acknowledged) through many different phases, or states. Fortunately however its *structural* peculiarities are so strongly expressed, that there can be no doubt whatsoever as to its real claims; seeing that (apart from its singularity of sculpture, which can scarcely be considered as structural) its larger and more escutcheon-shaped scutellum, and its differently composed eyes (in which the lenses are very much more minute, numerous, and depressed than in the *R. litura*), combine in giving it a character which, when once seen, it is impossible to mistake. The single specimen hitherto detected has been presented to the British Museum collection by its captor.

Fam. 44. CORYLOPHIDÆ.

Genus 169. CLYPEASTER.

(Andersch, *in Dej. Cat.*, 1821) Redt., *Fna Austr.* 572 (1849).

421. Clypeaster pusillus.

Cossyphus pusillus, *Gyll., Ins. Suec.* ii. 576 (1810).
Clypeaster pusillus, *Germ., Fna Col. Eur.* fasc. viii. 10 (1822).
—— ——, *Redt., Fna Austr.* 572 (1849).
—— ——, *Woll., Ins. Mad.*, 474. tab. x. f. 4 (1854).

Inhabits Madeira and the Dezerta Grande, occurring in grassy spots at intermediate altitudes.

Genus 170. ARTHROLIPS.

Wollaston, *Ins. Mad.* 475. tab. x. f. 6 (1854).

422. Arthrolips æquale, n. sp.

A. ovale subconvexum nigrum pubescens et subtiliter punctulatum, prothoracis limbo antico pallido subpellucido, antennis pedibusque longioribus infuscato-testaceis, illarum articulis quinque inter secundum et clavam subæqualibus minutissimis.
Long. corp. lin. $\frac{1}{2}$–$\frac{2}{3}$.

A. larger, and more parallel and oblong, than the following species (being of the same form as, though smaller than, the *Clypeaster pusillus*), as black and as shining as the *A. piceum*, but a little more evidently (though perhaps not quite so closely) punctulated, —the punctures on the elytra being (as in that insect) larger than those on the prothorax, though exceedingly shallow. *Prothorax* as in the *piceum*, but rather larger, and proportionably wider anteriorly; its hinder angles being, as there, a little produced and acute (a character which distinguishes them both from the *C. pusillus*). *Elytra* longer, and with the sides more parallel, than in the *A. piceum*, and with seldom any tendency to be diluted in colouring at their apex,—being in fact usually concolorous. *Limbs* longer than in the following species, and somewhat darker; and with the joints of the *antennæ* from the third to the seventh (inclusive) subequal, and excessively minute.

Until I had dissected the present insect, I had regarded it as a small, dark, and lightly punctured variety of the *Clypeaster pusillus*, —which, in general outline and aspect, it much resembles. But on inspecting its trophi and limbs, and mounting them for the microscope, I at once perceived that it was a true *Arthrolips*,—its antennæ being composed of only ten articulations; whilst the subequal length of the first and second joints of its feet, and the form of its labial palpi and ligula (the latter of which is nevertheless a trifle smaller than in the *A. piceum*), still further proved it to belong unquestionably to that group. It recedes however from its ally, not only in its larger size, straighter outline, more ample prothorax, and longer limbs, but likewise (which is its most remarkable feature) in the proportions of its antennal joints,—the *whole five* of which (instead of merely three of them) between the second and the club are extremely minute and *subequal* (the one adjoining the clava being perhaps, if anything, the *smallest* of them all); whereas in the *A. piceum* the third articulation is considerably elongated, and the seventh (adjoining the club) very much larger and thicker than the *preceding three*. The first and second joints, also, are far less robust than in that species,—the latter (which is, moreover, distinctly *shorter* than the former) being scarcely broader than the following (excessively minute) ones.

I detected it abundantly at S. Antonio, near Funchal, in the autumn of 1855, by brushing the coarse grass and vegetation in dry, semi-cultivated spots adjoining the Quinta dos Padres,—around the base of the Pico do Cardo: and specimens have been lately communicated to me by Mr. Bewicke. It would appear to be commoner in Madeira proper than the *A. piceum*, occurring however in much the same localities as that insect.

423. Arthrolips piceum.

Clypeaster piceus (*Kunze*), *Comolli, De Col. Nov.* 50 (1837).
—— obscurus, *Dej. Cat.* (3ième édit.) 455 (1837).
Gryphinus piceus, *Redt., Fna Austr.* 574 (1849).
Arthrolips piceum, *Woll., Ins. Mad.* 476. tab. x. f. 6 (1854).

Inhabits Madeira and the Dezerta Grande, being apparently somewhat rare in the former, but common in the latter.

Genus 171. SERICODERUS.

Stephens, *Ill. Brit. Ent.* ii. 188 (1828).

424. Sericoderus lateralis.

Cossyphus lateralis (*Meg.*), *Gyll., Ins. Suec.* iv. 516 (1827).
Sericoderus thoracicus, *Steph., Ill. Brit. Ent.* ii. 188 (1828).
Clypeaster lividus, *Dej. Cat.* (3ième édit.) 455 (1837).
Gryphinus lateralis, *Redt., Fna Austr.* 573 (1849).
Sericoderus lateralis, *Woll., Ins. Mad.* 478 (1854).

Inhabits Madeira and the Dezerta Grande; abounding in the former (in damp shady spots) at nearly all elevations, but being apparently scarce upon the latter,—where I detected a single specimen during June 1855.

Genus 172. CORYLOPHUS.

(Leach) Steph., *Man. Brit. Col.* 90 (1839).

425. Corylophus tectiformis.

Corylophus tectiformis, *Woll., Ins. Mad.* 480. tab. x. f. 9 (1854).

Inhabits Madeira proper, occurring in the moist sylvan districts of intermediate and lofty elevations.

Genus 173. GLŒOSOMA.

Wollaston, *Ins. Mad.* 480. tab. x. f. 7 (1854).

426. Glœosoma velox.

Glœosoma velox, *Woll., Ins. Mad.* 482. tab. x. f. 7 (1854).

Inhabits Madeira proper, and is hitherto unique,—the single specimen having been captured by myself at the Praya Formoza, near Funchal, on the 8th of May 1848.

Genus 174. ORTHOPERUS. (*Vide* Plate, fig. 3.)

Stephens, *Ill. Brit. Ent.* ii. 186 (1829).

Corpus minutissimum, rotundato-ovatum, glabrum, convexum: *oculis*

magnis, e lentibus paucis convexis compositis: *prothorace* sub-semicirculari, antice leviter truncato-emarginato (caput ob-triangulare vix omnino tegente), basi elytrorum latitudine, angulis posticis leviter productis acutis: *elytris* apice vel rotundatis vel subtruncatis: *mesosterno* lato: *alis* (3 *a*), fere ut in *Clypeaster*, amplissimis, ciliatis. *Antennæ* (3 *b*) prothorace paulo longiores, 9-articulatæ, subgraciles, arcuatæ, clavatæ, articulis 1mo et 2do (illo præcipue) elongatis robustis, 3^{tio} 4toque minutis, 5to majore crassiore, 6to minuto transverso, reliquis clavam elongatam minus abruptam 3-articulatam efficientibus (7mo et 8vo ad angulum internum leviter productis, 9no ovato basi truncato). *Mandibulæ* (3 *c*) incurvæ, acutæ, intus emarginatæ et membranâ tenuissimâ auctæ. *Maxillæ* (3 *d*) bilobæ; lobis elongatis angustis, apice barbatis. *Palpi maxillares* articulo 1mo minuto, 2do maximo inflato pyriformi, 3^{tio} minuto, ultimo elongato aciculari extus piloso necnon ad apicem ipsum setâ elongatâ armato: *labiales* (3 *e*) bi-articulati (?), articulo 1mo parvo transverso, 2do maximo subclavato apice barbato. *Mentum* amplum, subquadratum. *Ligula* antice rotundata integra (?). *Pedes* (3 *f*) graciles, *postici* valde distantes: *tibiis* ecalcaratis; *anticis* plus minus curvatis, ad apicem internum incurvo-productis: *tarsis* (ut mihi videtur) 4-articulatis, articulis 1mo et 2do longioribus subæqualibus inter se arcte connatis, 3^{tio} minutissimo, ultimo elongato clavato *unguiculis* simplicibus munito.

But few generic diagnoses having as yet appeared of *Orthoperus* (=*Pithophilus*, Heer, and *Microsphæra*, Redt.), I have subjoined, so far as I have been able to do so, a description of its structural details,—believing that any correct information on the characters of these minute groups of the *Corylophidæ* should be recorded, as tending to throw some additional light on the difficult question of their affinities. For the opportunity of examining its oral organs I am entirely indebted to Mr. Westwood, whose admirable dissections (which I have since mounted in Canada Balsam for the microscope) of the *O. atomarius*, from Madeira, have afforded me a satisfactory view of most of the parts; and having likewise, myself, prepared the antennæ and legs of a *typical* example of the same species communicated by Professor Heer of Zurich, as also of the *O. brunnipes* of our own country, I have been enabled to compare the corresponding limbs of several individuals, and of two distinct exponents of the genus. The result at which Mr. Westwood arrived with respect to the tarsi was, that they were pentamerous; and as such they were pronounced by Heer, when describing the *same species* (*atomarius*) as that from which Mr. Westwood's conclusion was drawn: but I must confess that I have not been able myself to distinguish more than four joints to their feet. It is however admitted by Mr. Westwood that the minute basal articulation on which the presence of more

than four depends is extremely difficult to detect,—especially in the common *brunnipes*, where it certainly would not be recognized to exist at all, did not its less dubious [?] occurrence in the diminutive *atomarius* afford us grounds (*à priori*) for suspicion that it would be there. It was indeed owing to the fact of Heer having described his *Pithophilus* as pentamerous, that Redtenbacher constituted the genus *Microsphæra*; for the latter expressly mentions that he should have regarded his insect as congeneric with Heer's, had not its tarsi been 4-jointed. My own belief however (as just stated) is, that the *Orthoperi* are in reality tetramerous, like the rest of the *Clypeastres*; and such moreover is the opinion of Mr. Haliday, whose intimate acquaintance with these minute groups, and very accurate powers of microscopic observation,—not to mention his extreme liberality in imparting his knowledge to others,—I have had abundant opportunities of testing.

The genus was first established by Stephens; albeit his characters are so absurdly erroneous, that it seems doubtful whether, strictly, Heer's correcter description of it (although subsequent in publication) should not have the preference.

Regarding its position (which is still much disputed) in a natural system, it appears to me that it is scarcely possible to separate it from the *Corylophidæ*. Indeed in the number and proportions of its antennal joints, as well as in its unspurred tibiæ (the anterior pair of which are slightly arcuated, and have their internal apical angle inwardly curved), it is almost coincident with *Corylophus* proper; whilst in the greatly inflated second joint of its palpi, and its largely developed, unveined, and ciliated wings, it partakes of the characteristics of the entire family very significantly. In the reduced dimensions however of the fourth articulation of its antennæ, from the apex, it assimilates (along with *Corylophus* and *Glœosoma*) some of the typical members of the *Anisotomidæ*,—into which group it is actually admitted by many Coleopterists.

427. Orthoperus atomus*.

O. rotundato-ovatus subnitidus subtilissime alutaceus punctulisque minutissimis parce obsitus, scutello postice rotundato obtuso, antennis pedibusque diluto-testaceis.
Long. corp. lin. $\frac{1}{2}$.

Cryptophagus atomus, *Gyll., Ins. Suec.* i. 185 (1808).

O. rounded-ovate, convex, piceous or rufo-piceous, slightly shining, free from pubescence, most delicately and closely alutaceous all over, and with most minutely impressed points (which are obsolete

on the prothorax) sparingly intermixed,—a peculiarity of sculpture which is only distinguishable beneath the microscope. *Scutellum* distinct, and semicircular,—being rounded and obtuse behind. *Limbs* diluted-testaceous.

The unique Madeiran specimen from which the above description has been drawn out agrees precisely with the *O. atomos* of our own country,—a species which may be readily known from the (more common) *O. brunnipes* by being a little smaller, of a less black (or more piceous) hue, and by its limbs being somewhat shorter and exceedingly pale. It was detected by myself on the inner wall of a house at Camacha (in Madeira proper), during the autumn of 1855; and it is worthy of remark that it is usually in similar positions (viz. on the white-washed walls of damp out-houses) that it is to be met with in England.

428. **Orthoperus atomarius*** (fig. 3).

O. rotundato-ovatus minutissimus picco-testaceus nitidus haud alutaceus sed punctis sat distinctis obsitus, scutello postice paulo acutiore, antennis pedibusque pallido-testaceis, illarum clavâ vix obscuriore.

Long. corp. lin. $\frac{1}{4}$–$\frac{1}{3}$.

Pithophilus atomarius, *Heer, Fna Col. Helv.* i. 433 (1841).

O. of the same form as the *O. atomus*, but considerably smaller, of a paler hue, being picco-testaceous (or when immature wholly testaceous), also somewhat more shining, with the punctures (particularly of the elytra) much larger and rather more numerous, and without any appearance beneath the microscope of the minutely alutaceous structure which characterizes the surface of that insect. *Prothorax* usually a little darker than the elytra. *Scutellum* rather smaller, in proportion, than that of the last species, and less strictly semicircular,—having a little tendency to be subacute posteriorly. *Limbs* rather paler than in the *atomus*, being very pale testaceous, and with the club alone of the antennæ slightly duskier.

Readily known from the last species, not only by its smaller size and more pallid hue, but likewise by its very much more distinctly punctulated surface, and by its total freedom from the minutely *alutaceous* sculpture which (when viewed beneath the microscope) is so apparent in that insect. It is also rather more shining, its limbs are paler, and its scutellum is less obtusely rounded behind. I have compared it most carefully with two *typical* examples of the *Pithophilus atomarius* of Heer, communicated by Professor Heer himself from Zurich, and I have no hesitation at all in pronouncing

it as specifically identical with them,—there being no appreciable difference whatsoever between the Madeiran and Swiss specimens, unless it be that the latter are perhaps, if possible, even a trifle smaller than the former (though scarcely perceptibly so). Moreover the habit assigned to it by Heer, "ad dolia cellarum," is much in accordance with its *habitat* in Madeira,—it being on the damp and dirty walls of old houses, which had been long shut up and untenanted, that I discovered it in the summer of 1855. It was indeed in the "Pilgrims' House" at S. Antonio da Serra that I first met with it,—where it was tolerably abundant, crawling out of the crevices of the wainscot and white-wash, in company with the *Mycetæa hirta*, *Calyptomerus dubius*, and such-like insects of a cellar- and house-infesting tendency.

If I am right (as I have but little doubt that I am) in regarding the preceding species as the true *Cryptophagus atomus* of Gyllenhal, it will be at once seen by a reference to the diagnosis that Heer's *Pithophilus atomarius* is totally distinct therefrom, and that consequently the European Catalogues are wrong which register the two as specifically identical.

Fam. 45. CLAMBIDÆ.

Genus 175. CALYPTOMERUS.

Redtenbacher, *Fna Austr.* 159 (1849).

Calyptomerus may be readily known by its minute, pubescent body, remarkably short and posteriorly rounded prothorax, and by its exceedingly broad, enormously developed head, which is produced into an angle (at which the eye is situated) on either side, and which it has the power of bending inwards, and applying closely to its prosternum,—when (its legs being retracted) it has the appearance, though less so than the *Clambi* and *Agathidia*, of a rounded ball. Its antennæ, which are implanted at the sides of the head (considerably in front of the eyes), in an incision of the margin of the clypeus, are composed of ten joints, the first and second of which are enlarged, the third to the eighth narrow, and decreasing in length, whilst the ninth and tenth form an abrupt bi-articulated club. Its upper lip is small, and concealed beneath the clypeus; its mandibles are acute and cleft at their apex; its maxillæ elongate and bilobed; and its maxillary palpi have their second joint incrassated, and their terminal one long and cylindrical. I have received some very interesting notes on the characters of this curious little genus from Mr. Haliday, whose accurate powers of observation render them

doubly valuable; and it would appear that he had regarded it as distinct from *Clambus* long before it was separated therefrom by M. Redtenbacher. It further appears from Mr. Haliday's observations, that in all the specimens which he had examined the feet were unquestionably tetramerous; and that the hinder ones therefore are *not* triarticulate, as stated by Redtenbacher,—who it is probable (as he had but a single example of his *C. alpestris* to judge from) was mistaken as to the number of tarsal (as he clearly was of the antennal) joints. Regarding its affinities, it would seem, with *Orthoperus*, to be connective between the *Clypeastres* and the *Anisotomidæ*,—being more allied however to the latter, just as *Orthoperus* is to the former; and since it can scarcely be admitted into either of those families, as rigidly defined, I avail myself of Mr. Haliday's suggestion, that it should be regarded as the type of a separate group, which we may denominate the *Clambidæ*.

429. **Calyptomerus dubius***.

C. ovatus rufo-testaceus impunctatus pubescens, elytris antice valde postice minus convexis, basin versus picescentioribus, antennis (clavâ obscuriore exceptâ) pedibusque pallidis.
Long. corp. lin. $\frac{1}{2}$.

Scaphidium dubium, *Mshm, Ent. Brit.* i. 234 (1802).
Clambus Enshamensis (*Westw.*), *Steph., Ill. Brit. Ent.* ii. 184 (1829).
Calyptomerus alpestris ?, *Redt., Fna Austr.* 159 (1849).

C. ovate, reddish-testaceous (the head and prothorax being of a clearer colour than the elytra), pubescent, shining, and impunctate. *Elytra* very convex anteriorly (where they are of a duller, or more brownish-piceous, hue), but flatter towards their apex. *Limbs* (except the club of the antennæ, which is darker) very pale, and fragile.

Detected by myself, during the summer of 1855, in Madeira proper,—crawling on the damp inner walls of houses at S. Antonio da Serra, Camacha, and Feijãa d'Ovelha; and it is worthy of remark, that it is in somewhat similar positions that it is usually to be met with in more northern latitudes, and in company moreover with the very same insects,—viz. *Orthoperus*, the *Mycetœahirta*, and *Lathridius*†.

† However commonly associated in our own country, it is singular that these self-same species should be met with in company even in the most remote of the inhabited districts of Madeira. Such insects as the *Cryptophagi* and *Ptini*, which are often found with them, are less remarkable in such positions, being liable to constant introduction everywhere; but *Calyptomerus* and the *Orthoperi* are not usually thus disseminated, and moreover, are more particularly attached to the inner walls of damp and *neglected* buildings.

Sectio XI. ATRACHELIA.

Fam. 46. ANISOTOMIDÆ.

Genus 176. STAGONOMORPHA.

Wollaston, *Ins. Mad.* 484. tab. x. f. 8 (1854).

430. Stagonomorpha sphærula.

Stagonomorpha sphærula et unicolor, *Woll., Ins. Mad.* 484, 485. tab. x. f. 8 (1854).

Inhabits Madeira proper, occurring in the damp sylvan districts towards the north of the island: exceedingly rare. It varies in the colour of its prothorax, from rufo-testaceous into black; and it was to an unusually dark specimen that, in the *Insecta Maderensia*, I gave the name of *unicolor*.

Genus 177. STEREUS, nov. gen. (*Vide* Tab., fig. 1.)

Corpus parvum, suborbiculato-ovatum, valde convexum, robustum, crassum: *capite* deflexo, sed ad pectus haud applicando; *oculis* parvis subrotundatis: *prothorace* amplo, postice lato; *pronoto* elytrorum basin scutellumque plus minus obtegenti: *mesosterno* simplici; *scutello* sat magno triangulari (quum caput minus deflectitur e visu abscondito): *alis* obsoletis: *abdomine* e segmentis ventralibus sex composito. *Antennæ* (1 *a*) 11-articulatæ, breves, robustæ, clavatæ, inter sed pone oculos insertæ, artº 1mo leviter incrassato, 2do 3tio vix crassiore, 3tio ad 8vum parvis longitudine decrescentibus, reliquis clavam magnam abruptam ovalem 3-articulatam efficientibus (ultimo ad apicem truncato). *Labrum* sub clypeo lato robusto reconditum. *Mandibulæ* (1 *b*) magnæ, porrectæ, robustissimæ, corneæ, subtriangulares, valde exsertæ, unâ intus dente magno singulo submedio et alterâ dentibus duobus (sc. intus apicem et pone medium) armatis. *Maxillæ* (1 *c*) bilobæ, lobis brevibus pubescentibus; *interno* lato. *Palpi* elongati: *maxillares* artº 1mo parvo, 2do 3tioque majoribus subæqualibus leviter clavatis, ultimo longiore subovali: *labiales* (1 *d*) e scapis ligulæ connatis surgentes, artº 1mo parvo, 2do 3tioque subæqualibus (hoc subovali). *Mentum* transversum, antice integrum leviter angustatum, angulis anticis paulo productis. *Ligula* ampla, profunde biloba, lobis magnis divergentibus. *Pedes* (1 *e*, 1 *f*) breves robustissimi, *antici* et *postici* ad basin approximati, *intermedii* leviter distantes: *femoribus* in sexu fœmineo simplicibus, in masculo latioribus necnon intus versus apicem dente magno armatis: *tibiis* compressis, apicem versus valde dilatatis, per marginem exteriorem fortiter

spinosis; *posterioribus* calcari singulo armatis: *tarsis omnibus* in utroque sexu 5-articulatis, articulis (ultimo longiore excepto) inter se subæqualibus.

A. στερεὸς *solidus*.

The curious little insect (so accurately drawn by Mr. Westwood) from which the above structural characters have been compiled, agrees in its 3-jointed club, unkeeled mesosternum, and the pentamerous feet of both its sexes, with *Triarthron*; nevertheless, in all its other details it differs essentially from that genus. In its exceedingly thickened, suborbicular body indeed (which, at first sight, much resembles that of a minute *Cercyon*), and very short and robust limbs, as well as in the armature of its immensely developed, uncovered mandibles, and its dilated, spinose tibiæ (which, like those of the Cercyons, seem constituted for burrowing), it presents a combination of features peculiarly its own; whilst the powerful tooth with which the hinder femora of its males are furnished will serve additionally to distinguish it. Its prothorax is of the exact width posteriorly as the base of the elytra, over which the extreme (and subpellucid) hinder margin of its pronotum slips,—concealing more or less of the scutellum, according as the head is upraised or deflected; and indeed when the latter is in an entirely horizontal position, the scutellum is altogether invisible from above.

431. **Stereus Cercyonides**, n. sp. (fig. 1).

S. orbiculato-ovatus niger vel piceus glaber nitidus parce et subtilissime punctulatus, capite vix picescentiore, antennis pedibusque picco-testaceis, illarum clavâ obscuriore.

Long. corp. lin. $\frac{3}{4}$–1.

S. orbiculate-ovate, exceedingly convex, black or piceous-black (rarely altogether piceous), shining, entirely free from pubescence, most densely and delicately alutaceous (or, as it were, subgranulated) all over, and very sparingly beset with most minutely impressed points. *Head* generally a little more piceous than the prothorax and elytra. *Prothorax* with its extreme hinder margin more or less pellucid and diluted in colouring, but appearing concolorous with the rest of the surface when it is closely applied over the base of the elytra and the scutellum. *Limbs* picco-testaceous; except the club of the antennæ, which is somewhat darker.

Detected by myself in Madeira proper, during the summer of 1855. It is apparently very rare, and confined to the sylvan districts of intermediate altitudes,—in which positions I captured it, at the head of the Santa Cruz ravine (at S. Antonio da Serra), as also at the Lombo de Vaca, beneath moist, decaying leaves on the damp ground.

Fam. 47. DIAPERIDÆ.

Genus 178. ELLIPSODES.

Wollaston, *Ins. Mad.* 485. tab. xi. f. 2 (1854).

432. Ellipsodes glabratus.

Sphæridium glabratum, *Fab.*, *Ent. Syst.* i. 79 [test. *Mus°. Banks°.*] (1792).
—— ——, *Fab.*, *Syst. Eleu.* i. 93 (1801).
Ellipsodes glabratus, *Woll.*, *Ins. Mad.* 486. tab. xi. f. 2 (1854).

Inhabits the mountains of Madeira proper, ranging from about 1500 feet above the sea to the extreme summits of the peaks.

433. Ellipsodes oblongior, n. sp.

Ellipsodes glabratus, var. β, *Woll.*, *Ins. Mad.* 486 (1854).

Inhabits Porto Santo and the two Southern Dezertas, occurring beneath stones in grassy spots of a high elevation. Rare. Although recorded in the *Insecta Maderensia* as the Dezertan form of the *E. glabratus*, I am induced to regard it now as specifically distinct therefrom, through the fact of my having discovered it (during the summer of 1855) in Porto Santo and the Southern Dezerta, likewise; and it seems too much to assume, that the local influences of those three islands should be of such a similar nature as to produce exactly the same modification from the Madeiran type. Nevertheless I am by no means convinced that it *may* not be a phasis of that insect; for, although the more oblong outline (especially perceptible posteriorly), the somewhat paler antennæ, the less deeply and more remotely punctured surface, and the tendency which its *larger* elytral punctures possess of being disposed in obscure longitudinal rows, would seem to remain constant both in Porto Santo and on the Dezertas, its *alutaceous* structure is apparently subject to variation,—being exceedingly evident in the specimens from the Dezerta Grande, less so in those from Porto Santo, and still less in the Bugian ones. The tibiæ, also, are more darkly infuscated upon the Southern than upon the Central Dezerta: still, after a careful consideration of all its characters (both constant and inconstant), I think we have scarcely sufficient evidence for concluding it to be specifically identical with its Madeiran ally.

Genus 179. PHALERIA.

Latreille, *Hist. Nat. des Crust. et Ins.* iii. 162 (1802).

434. Phaleria ciliata.

Phaleria ciliata, *Woll., Ins. Mad.* 488 (1854).

Inhabits Porto Santo, occurring in the sand (at the roots of plants), and beneath animal refuse, behind the southern beach.

Fam. 48. TENEBRIONIDÆ.

Genus 180. CERANDRIA.

(Dej., *Cat.* 222) Lucas, *Col. de l'Algérie*, 345 (1849).

435. Cerandria cornuta**.

Trogosita cornuta, *Fab., Ent. Syst. Suppl.* 51 (1798).
Phaleria cornuta, *Lat., Gen. Crust. et Ins.* ii. 175 (1807).
Uloma cornuta, *Steph., Ill. Brit. Ent.* v. 10 (1832).
Cerandria cornuta, *Lucas, Col. de l'Algérie*, 345 (1849).

Inhabits Madeira proper, occurring in the houses and granaries of the villages and towns: I also, on one occasion, captured a specimen on the Dezerta Grande; but it had most likely been accidentally imported thither amongst the provisions which we had brought from Funchal.

Genus 181. TRIBOLIUM.

MacLeay, *Ann. Javan.* 47 (1825).

436. Tribolium ferrugineum**.

Tenebrio ferrugineus, *Fab., Spec. Ins.* i. 324 (1781).
Colydium castaneum, *Hbst, Käf.* vii. 282. tab. 112. f. 13. E (1797).
Tribolium castaneum, *MacLeay, Ann. Javan.* 47 (1825).
Stene ferruginea, *Steph., Ill. Brit. Ent.* v. 9 (1832).
Tribolium ferrugineum, *Woll., Ins. Mad.* 491 (1854).

Inhabits Madeira proper, occurring in the houses of the villages and towns.

Genus 182. HYPOPHLŒUS.

Fabricius, *Scrivt. af Natur. Selsk.* (1790).

The very abbreviated, stout, compressed, and gradually thickened antennæ of *Hypophlœus*, in conjunction with the glabrous, linear-elongate, subcylindrical bodies, the quadrate prothorax, and the short, robust legs of its various members, will be sufficient to distinguish it from the allied Madeiran groups. Its four posterior tibiæ are almost unarmed (although spinulose) at their apex, but the anterior pair (which are more dilated and flattened-out than the others,

and with their exterior angle a good deal prominent) have a curved and powerful inner spur,—usually very evident. In their habits the species are either subcortical or granivorous, possessing a good deal in common with *Tribolium* and *Cerandria*,—and even with the Necrophagous *Trogositæ* and *Lycti*.

437. **Hypophlœus ambiguus**, n. sp.

H. linear-elongatus rufo-ferrugineus nitidus, capite prothoraceque subtiliter punctatis, elytris subfusiformibus basi truncatis, leviter punctato-striatis, interstitiis minutissime uni-seriatim punctulatis. Long. corp. lin. $1\frac{1}{8}$.

H. linear-elongate and narrow, bright rufo-ferruginous, and shining. *Head* and *prothorax* less closely and coarsely punctured than in *Tribolium ferrugineum*: the *former* with the *forehead* rounded and elevated along its anterior edge, but very much less expanded before the eyes than in that insect,—scarcely indeed projecting so far as them; and with the *clypeus* well defined and semicircular, being raised anteriorly (which is not the case in *Tribolium*) continuously with the rest of the forehead at its edges: the *latter* quadrate, slightly widened in front, and with its posterior angles almost right angles. *Elytra* subfusiform, and truncated at the base,—being rather broader a little before the middle than elsewhere; lightly punctate-striated, and each of the interstices with a longitudinal row of very minutely impressed points. *Legs*, and the apical joint of the *antennæ*, a trifle paler than the rest of the surface.

Two examples of the present *Hypophlœus* were detected by Mr. Mason during 1856, but in what part of the island I am not able to state,—further than that they were mixed up with insects from the upland region of the Fanal. Being thus however associated, I should not hesitate to regard them as natives of that elevated district, did I not feel it possible that (if there obtained) they may have been accidentally conveyed thither, amongst provisions, from Funchal,—and especially so since the European *H. depressus*, to which the *ambiguus* is closely allied, is eminently granivorous in its habits, attaching itself to granaries and such-like spots: and I am further confirmed in this hypothesis by finding in the same bottle specimens of the *Sitophilus Oryzæ*, which clearly *must* have been captured either in or around his tent. It differs from the *H. depressus*, Fab., in being a good deal smaller, somewhat narrower in proportion, and in its prothorax being less expanded in front.

Genus 183. **BOROMORPHUS.**

(Mots.) Wollaston, *Ins. Mad.* 492. tab. xi. f. 9 (1854).

438. **Boromorphus Maderæ.**

Boromorphus Maderæ, *Woll., Ins. Mad.* 493. tab. xi. f. 9 (1854).

Inhabits Madeira and Porto Santo, occurring beneath stones in hot, sunny spots of a low elevation,—especially in the vicinity of the coast.

Genus 184. **CALCAR.**

(Dej., *Cat.* 1821) Latreille, *Règ. Animal* (2ième édit.), v. 25 (1829).

439. **Calcar elongatus.**

Tenebrio elongatus, *Illst, Käf.* vii. 259. tab. 112. f. 2 (1797).
Trogosita calcar, *Fab., Syst. Eleu.* i. 153 (1801).
Calcar elongatus, *Lucas, Col. de l'Algérie*, 337 (1849).
—— ——, *Woll., Ins. Mad.* 495 (1854).

Inhabits Madeira and Porto Santo; occurring beneath stones in hot, sunny spots of a low elevation. Its detection in the latter island is due to Mr. Bewicke, who captured a single specimen on the Campo de Baixo during December 1856.

Genus 185. **TENEBRIO.**

Linnæus, *Syst. Nat.* edit. 6 (1748).

440. **Tenebrio molitor**.**

Tenebrio molitor, *Linn., Fna Suec.* 815 (1761).
—— ——, *Fab., Ent. Syst.* i. 111 (1792).
—— ——, *Steph., Ill. Brit. Ent.* v. 8 (1832).
—— ——, *Woll., Ins. Mad.* 496 (1854).

Inhabits Madeira proper, occurring in the shops and bakehouses of Funchal. It has established itself also in the Canary Islands.

441. **Tenebrio obscurus**.**

Tenebrio obscurus, *Fab., Ent. Syst.* i. 111 (1792).
—— ——, *Gyll., Ins. Suec.* ii. 591 (1810).
—— ——, *Steph., Ill. Brit. Ent.* v. 8 (1832).
—— ——, *Woll., Ins. Mad.* 497 (1854).

Inhabits Madeira proper, occurring with the last species,—and being, like it, imported into the island.

Genus 186. **ALPHITOBIUS.**

Stephens, *Ill. Brit. Ent.* v. 11 (1832).

442. Alphitobius diaperinus**.

Tenebrio diaperinus, *Kugelann, in Panz. Fna Ins. Germ.* 37. 16 (1797).
—— ——, *Illig., Käf. Preuss.* i. 115 (1798).
—— ovatus, *Hbst, Käf.* viii. 16. tab. 118. f. 8 (1799).
Alphitobius mauritanicus, *Steph.* [nec *Fab.* 1792], *Ill. Brit. Ent.* v. 11 (1832).
—— diaperinus, *Woll., Ins. Mad.* 498 (1854).

Inhabits Madeira proper, occurring in similar places as the last two species.

Fam. 49. OPATRIDÆ.

Genus 187. **AUTOCERA**, nov. gen.? (*Vide* Tab., fig. 2.)

Corpus parvum, lineari-oblongum, angustum: *capite* lato, postice subito truncato, ad latera leviter elevato, ad apicem fere integro: *prothorace* transverso: *alis* amplis. *Antennæ* (2 *a*) breves, leviter clavatæ, articulo 1mo sat robusto, 2do ad 8vum minoribus transversis subæqualibus, reliquis clavam haud abruptam 3-articulatam efficientibus. *Mandibulæ* (2 *b*) validæ corneæ, apice bidentatæ, intus in medio emarginatæ et membranâ auctæ. *Maxillæ* (2 *c*) bilobæ, lobis apice pubescentibus; *interno* minore. *Palpi* subfiliformes, artº ultimo ovato; *labiales* ad latera ligulæ inserti. *Mentum* (2 *d*) subquadratum, apice late emarginatum. *Ligula* ampla, lata, apice integra. *Pedes* (2 *e*, 2 *f*) robusti: *tibiis anticis* (2 *e*) valde dilatatis compressis, necnon ad apicem internum calcariis duobus (uno sc. magno, altero maximo) armatis: *tarsis* heteromeris, *anticis* brevissimis subconicis.

Although distinct therefrom specifically, the curious little insect from which the above structural diagnosis has been compiled is generically identical with a specimen which I received long ago from the late Mr. Melly of Liverpool, under the name of *Autocera anticipes*. I can find no published reference to anything bearing this title, and I conclude therefore that (by whomsoever proposed) it has never been characterized. Before I had overhauled the two species critically, I had imagined them to be minute members of the genus *Sclerum* of Dejean,—which merges gradually into *Opatrum* proper, and from which therefore (like *Gonocephalum*) it can scarcely be detached; but, upon a more intimate examination, I find that they are totally distinct from the representatives of that group. Thus, apart from their diminutive bulk and almost unemarginated head, they recede from the *Opatra* in the proportions of their antennal joints, all of which between the basal one and the club are small and subequal, so that the third is *not* longer than the second and fourth; whilst

the club itself, formed by the terminal three, is comparatively well defined; in the ultimate articulation of their maxillary palpi being ovate, instead of securiform; in their totally different lower lip; and, *inter alia*, in the structure of their fore-legs,—which have the tibiæ immensely dilated and compressed, and armed at their inner apex with two gigantic spurs (one of which however is more enormously developed than the other), and the tarsi extremely short and subconical. Mr. Melly's specimen is, I believe, from Mediterranean latitudes,—probably from either Sicily or Egypt.

443. **Autocera laticeps,** n. sp. (fig. 2).

A. fusco-brunnea dense squamosa, capite postice lato, prothorace lato basin versus angustiore, in disco bifoveolato, elytris profunde striato-punctatis, interstitiis alternis elevatis, antennis rufo-ferrugineis.
Long. corp. lin. $1\frac{1}{4}$.

A. narrow and sublinear, piceous and densely clothed with dull rusty-brown scales, but free from pubescence. *Head* and *prothorax* beset with rather large granules (perceptible only, however, when the surface is denuded of its scales): the *former* wide, and suddenly truncated immediately behind the eyes (which are very prominent); and with the forehead expanded at the sides, a little in front of the eyes, where it is somewhat angular: the *latter* very wide in front (where it is broader than the head), but a little narrowed posteriorly; with a deep central channel, and a deep fovea on either side of its disk. *Elytra* with the sides parallel; deeply striate-punctate; and with the alternate interstices raised. *Limbs* short and robust, the antennæ (which are bright rufo-ferruginous) being paler than the legs. The *anterior tibiæ* greatly dilated and flattened, but with the outer edge scarcely crenulated.

Closely allied to the (Sicilian ?) species already alluded to under the name of *Autocera anticipes*, but with the head wider along its hinder margin,—the result apparently however of the eyes being larger and more prominent, and so extending *beyond* the dilated edges of the forehead (which are, themselves, *more angular* above the insertion of the antennæ). Its prothorax also is less narrowed posteriorly than in that insect, and less sinuated (or produced) at the base, in front of the scutellum; and its anterior tibiæ are less perceptibly serrated externally, and have their outer angle obtuse and entire,—instead of being cleft into (or surmounted by) two spinules. A single specimen (now in the British Museum) was detected by myself on the ascent from Santa Cruz to S. Antonio da Serra (in the east of Madeira proper), on the 11th of June 1855,—the only one which has hitherto come under my observation.

Genus 188. **OPATRUM.**

Fabricius, *Syst. Ent.* 76 (1775).

444. Opatrum fuscum.

Opatrum fuscum, *Hbst, Käf.* v. 225. tab. 52. f. 1 (1793).
—— tomentosum, *Dej., Cat.* (3ième édit.) 214 (1837).
—— septentrionale, *Falderm., in litt.*
—— fuscum, *Woll., Ins. Mad.* 500. tab. xi. f. 1 (1854).

Inhabits Madeira, Porto Santo, and the Dezerta Grande; occurring principally in hot and dry spots of a low elevation. It is found also in the Canary Islands and at the Cape de Verdes.

445. Opatrum errans.

Opatrum errans, *Woll., Ins. Mad.* 501. tab. xi. f. 3 (1854).

Inhabits Madeira proper, occurring on the mountain-slopes of intermediate and lofty elevations.

Genus 189. **HADRUS.**

(Dej., *Cat.* 1837) Wollaston, *Ins. Mad.* 502. tab. xi. f. 4, 5, 6 (1854).

446. Hadrus alpinus.

Hadrus alpinus, *Woll., Ins. Mad.* 502. tab. xi. f. 5 (1854).

Inhabits the mountains of Madeira proper, occurring at intermediate altitudes.

447. Hadrus cinerascens.

Hadrus cinerascens, *Dej., Cat.* (3ième édit.) 214 (1837).
—— ——, *Woll., Ins. Mad.* 503. tab. xi. f. 4 (1854).

Inhabits Madeira and the three Dezertas, abounding beneath stones at all altitudes.

448. Hadrus illotus.

Hadrus illotus, *Woll., Ins. Mad.* 503. tab. xi. f. 6 (1854).

Inhabits Porto Santo, abounding at low and intermediate elevations.

Fam. 50. BLAPSIDÆ.

Genus 190. **MACROSTETHUS.**

Wollaston, *Ins. Mad.* 504. tab. xi. f. 8 (1854).

449. Macrostethus tuberculatus.

Macrostethus tuberculatus, *Woll., Ins. Mad.* 505. tab. xi. f. 8 (1854).

Inhabits the Northern Dezerta, or Ilheo Chão, occurring beneath stones in the centre of the island,—where it was first detected by the Rev. R. T. Lowe. Exceedingly rare.

Genus 191. BLAPS.

Fabricius, *Syst. Ent.* 254 (1775).

450. Blaps gages*.

Tenebrio gages, *Linn., Syst. Nat.* ii. 676 [script. per err. *gigas*] (1767).
Blaps gages, *Fab., Ent. Syst.* i. 106 (1792).
—— gigas, *Lat., Hist. Nat. des Crust. et Ins.* x. 278 (1804).
—— gages, *Woll., Ins. Mad.* 506 (1854).

Inhabits Madeira and Porto Santo; occurring beneath stones, and in basaltic caverns, along the sea-shore. It is found likewise in the Canarian Group.

451. Blaps fatadica*.

Blaps fatadica (*Creutzer*), *Sturm, Deutsch. Fna*, ii. 205. t. 45. f. *a*, *b* (1807).
—— ——, *Dufts., Fna Austr.* ii. 282 (1812).
—— obtusa, *Steph., Ill. Brit. Ent.* v. 23 (1832).
—— fatadica, *Woll., Ins. Mad.* 508 (1854).

Inhabits Madeira and Porto Santo, occurring in similar places as the last species,—and, like it, being found also in the Canary Islands.

Fam. 51. TENTYRIADÆ.

Genus 192. HEGETER.

Latreille, *Hist. Nat. des Crust. et Ins.* iii. 172 (1802).

452. Hegeter elongatus.

Blaps elongata, *Oliv., Ent.* iii. 60. pl. 1. f. 7 (1795).
Hegeter striatus, *Lat., Hist. Nat. des Crust. et Ins.* x. 276 (1804).
—— ——, *Solier, Ann. de la Soc. Ent. de France*, iv. 377 (1835).
—— elongatus, *Woll., Ins. Mad.* 510. tab. xi. f. 7 (1854).

Inhabits Madeira and Porto Santo; occurring beneath stones, and in basaltic caverns, at low and intermediate altitudes. It is found, likewise, in the Canaries and the Cape de Verdes; as also on the western coast of Africa.

Fam. 52. HELOPIDÆ.

Genus 193. HELOPS.

Fabricius, *Syst. Ent.* 257 (1775).

453. Helops Vulcanus.

Helops Vulcanus, *Woll., Ins. Mad.* 513. tab. xii. f. 1 (1854).

Inhabits Madeira and the three Dezertas; congregating between the fissures of the rocks, and beneath stones, towards the coast.

454. Helops confertus.

Helops confertus, *Woll., Ins. Mad.* 515. tab. xii. f. 2 (1854).

Inhabits Madeira proper; occurring beneath stones, and the loosened bark of trees, at all elevations. In the higher regions it is generally more lightly sculptured than it is in the lower ones.

455. Helops Pluto.

Helops Pluto, *Woll., Ins. Mad.* 516. tab. xii. f. 3 (1854).

Inhabits the mountains of Madeira proper; occurring from about 3000 feet above the sea to the extreme summits of the peaks.

456. Helops infernus.

Helops infernus, *Woll., Ins. Mad.* 517. tab. xii. f. 4 (1854).

Inhabits Porto Santo (and the adjacent islands); occurring, beneath stones, at low and intermediate altitudes.

457. Helops subdepressus, n. sp.

H. oblongo-ovatus depressus piceus subopacus confertissime punctulatus, prothorace amplo ad latera basin versus sinuato (angulis posticis rectis), elytris vix punctulatis aut rugulosis, leviter crenato-striatis, interstitiis apicem versus seriatim tuberculatis, antennis pedibusque læte rufo-ferrugineis.
Long. corp. lin. 4.

H. oblong-ovate, depressed, more or less brightly piceous, and nearly opake. *Head* and *prothorax* most closely, and rather roughly, punctured: the *latter* large, widest about (or a little before) the middle, where it is rounded; and with the sides sinuated behind, —causing the posterior angles to be right angles. *Elytra* scarcely perceptibly punctured, and but very slightly rugulose, lightly

crenate-striated; the interstices with the hinder tubercles very distinct. *Limbs* pale rufo-ferruginous.

This well-marked *Helops* may be at once recognized from the remainder here enumerated, by its depressed body, piceous and almost opake surface, by its rather lightly striated elytra (the interstices of which are almost free from punctures, and are but slightly rugulose), and by its comparatively pale limbs. In its posteriorly narrowed (or sinuated) prothorax it approaches the *H. Vulcanus*; but in general affinity it is more allied, I think, to the Porto-Santan *H. infernus* than to any of the other species. Three specimens of it have been lately communicated by Mr. Mason, by whom they were captured at São Vincente (in the north of Madeira proper); and who has presented one of them to the British Museum collection.

458. **Helops lucifugus.**

Helops lucifugus, *Woll., Ins. Mad.* 518. tab. xii. f. 5 (1854).

Inhabits Porto Santo; occurring beneath stones at most elevations, though especially towards the mountain-tops.

459. **Helops congregatus.**

Helops congregatus, *Woll., Ins. Mad.* 518. tab. xii. f. 6 (1854).

Inhabits Madeira and the two Southern Dezertas; occurring, principally, in the crevices of the rocks at a rather lofty elevation.

460. **Helops futilis.**

Helops futilis, *Woll., Ins. Mad.* 520. tab. xii. f. 7 (1854).

Inhabits Madeira and the two Southern Dezertas, occurring at rather low and intermediate altitudes. A more intimate acquaintance with this species, since the publication of the *Insecta Maderensia*, has convinced me that it is more variable in stature than I there indicated, many of the specimens attaining $4\frac{1}{4}$ lines in length. The colour of the elytra, also, is somewhat inconstant,—the *tendency* being to become darker in that region, than on the head and prothorax. The examples, however, from the Dezertas and the east of Madeira proper are usually altogether rufo-ferruginous.

461. **Helops Portosanctanus.**

Helops Portosanctanus, *Woll., Ins. Mad.* 521. tab. xii. f. 9 (1854).

Inhabits Porto Santo, abounding beneath stones at a low elevation.

462. **Helops cinnamomeus.**

Helops cinnamomeus, *Woll., Ins. Mad.* 520. tab. xii. f. 8 (1854).

Inhabits Madeira proper, occurring in dry spots of a low elevation.

463. **Helops pallidus.**

H. cylindrico-oblongus convexus pallido-testaceus subnitidus, prothorace confertim punctato basi paulo attenuato, elytris leviter crenato-striatis, interstitiis minutissime punctulatis.
Long. corp. lin. $3\frac{1}{2}$–5.

Helops pallidus, *Curtis, Brit. Ent.* vii. 298 (1830).

H. cylindric-oblong and convex, pale-testaceous (the eyes alone being dark), and slightly shining. *Head* and *prothorax* rather closely and distinctly punctured: the *latter* transverse-quadrate, and a little narrowed behind,—where it is almost as broad as the base of the elytra. *Elytra* lightly crenate-striated, and minutely punctulated all over, the punctures being very much smaller and shallower than those on the prothorax.

Detected by myself (at a considerable depth beneath the surface) on the sand-hills, behind the sea-beach, of Porto Santo, during May 1855,—at the roots of *Arundo donax*, and the few other plants which flourish in that locality. The specimens are just perceptibly less shining than our British ones, are a trifle more closely punctulated, and have their prothorax not quite so much narrowed behind; but I cannot regard these minute and unimportant differences as of more than geographical significance. It occurs in the maritime and subsaline districts of central and southern Europe, as also in the north of Africa.

Sectio XII. TRACHELIA.

Fam. 53. ŒDEMERIDÆ.

Genus 194. **STENAXIS.**

Schmidt, *in Linn. Entom.* i. 87 (1846).

464. **Stenaxis Lowei.**

Stenaxis Lowei, *Woll., Ins. Mad.* 524. tab. xiii. f. 2 (1854).

Inhabits Madeira proper; occurring in flowers (especially towards the north of the island) at intermediate elevations.

Fam. 54. SALPINGIDÆ.

Genus 195. SALPINGUS.

Illiger, *Mag. für Insekt.* i. 301 (1802).

The discovery of the present genus in Madeira, since the publication of the *Insecta Maderensia*, has added a new family to our Catalogue, the *Salpingidæ*,—a group which has usually been regarded by British authors as closely akin to *Anthribus*; and which they have consequently placed in juxtaposition with the *Bruchidæ*, at the end of the *Rhyncophora*. The structure of the tarsi, however, of its various representatives, proves it to be strictly Heteromerous, and allied to the *Œdemeridæ*; whilst the more or less rostrated head, and remotely inserted antennæ, which constitute its most distinctive features, are exactly paralleled in the genera *Probosca*, *Chitona*, *Stenostoma* and *Mycterus*, of the latter,—and even in *Stenaxis* also, though in a less degree. *Salpingus* proper may be known by its head being less produced, and broader, than in the allied European genus *Rhinosomus*, and by its antennæ being inserted at a shorter distance in front of the eyes. Its mandibles are long, and internally serrated, its antennæ subclavate, its palpi are filiform, its upper lip is large, exserted, and ovate, and its lower lip is rather elongated,—the mentum being transverse, and the ligula largely developed and rounded in front.

465. **Salpingus impressus**, n. sp.

S. æneus nitidus, capite prothoraceque profunde punctatis, hoc in medio utrinque impresso, postice angustato, elytris leviter punctato-striatis, ad basin inæqualibus, pone basin obsolete transversim constrictis, antennarum basi, palpis pedibusque plus minus piceo-testaceis.

Mas, capite prothoraceque vix crebrius et profundius punctatis, antennis paulo robustioribus.

Long. corp. lin. $1\frac{1}{2}$.

S. æneous (when immature, with a slightly piceous tinge), and shining. *Head* and *prothorax* deeply punctured: the *former* with the forehead flattened, and more or less longitudinally strigulose (especially in the males): the *latter* narrowed behind, and with a large impression on either side of its fore disk; and occasionally (peculiar perhaps to the females) with an obscure transversely impressed line towards the base. *Elytra* broader than the head and prothorax, with the sides nearly parallel, and lightly punctate-striated; uneven (or subnodulose) at their base, especially about the shoulders; and obsoletely constricted transversely, or im-

pressed, behind this uneven region. *Antennæ at base, palpi,* and *legs,* more or less brightly piceo-testaceous. *Antennæ at apex* darker, or more piceous.

Male, with the head and prothorax rather more closely and coarsely punctured, and with the antennæ just perceptibly more robust.

A single example of the present *Salpingus* was detected by myself on the Lombo de Vaca (in the north of Madeira proper), at the beginning of August 1855; and two more have been subsequently captured by Mr. Bewicke on the hills above Funchal,—one outside a newly cut chestnut-log at Camacha, and the other (beneath bark) at the Mount. It is apparently exceedingly rare.

Fam. 55. MELOIDÆ.

Genus 196. MELOË.

Linnæus, *Syst. Nat.* edit. 1 (1735).

466. Meloë austrinus.

Meloë austrinus, *Woll., Ins. Mad.* 527 (1854).

Inhabits Madeira proper, occurring on the grassy slopes (principally) of a rather low elevation.

467. Meloë rugosus.

Meloë rugosus, *Mshm, Ent. Brit.* i. 483 (1802).
—— punctatus, *Steph., Ill. Brit. Ent.* v. 68 (1832).
—— rugulosa, *Brullé, in Webb et Berth. Hist. Nat. des Iles Canar.* 70 (1839).
—— rugosus, *Woll., Ins. Mad.* 527 (1854).

Inhabits Madeira and Porto Santo, occurring in similar spots as the last species, and being rarer in the latter than in the former. It is found also in the Canary Islands.

468. Meloë flavicomus.

Meloë flavicomus, *Woll., Ins. Mad.* 528. tab. xiii. f. 1 (1854).

Inhabits Madeira, Porto Santo, and the Dezerta Grande,—being rare in the first and last of those islands, but abounding in the second.

Genus 197. ZONITIS.

Fabricius, *Syst. Ent.* 126 (1775).

469. Zonitis 4-punctata.

Mylabris 4-punctata, *Fab., Ent. Syst.* i. ii. 89 (1792).
—— ——, *Fab., Syst. Eleu.* ii. 84 (1801).
Zonitis 4-punctata, *Lucas, Col. de l'Algérie*, 395 (1849).
—— ——, *Woll., Ins. Mad.* 530 (1854).

Inhabits Madeira and Porto Santo; occurring, on flowers, in hot spots of a low elevation.

Fam. 56. MORDELLIDÆ.

Genus 198. ANASPIS.

Geoffroy, *Hist. Abr. des Ins.* 315 (1762).

470. Anaspis Proteus.

Anaspis Proteus, *Woll., Ins. Mad.* 532 (1854).

Inhabits every island of the Madeira Group; abounding in flowers at nearly all altitudes, though especially at low and intermediate ones.

Fam. 57. ANTHICIDÆ.

Genus 199. FORMICOMUS.

La Ferté, *Mon. des Anth.* 70 (1848).

The genus *Formicomus* (which is a recent addition to our Catalogue) is mainly distinguished from *Anthicus* proper by its body being more oval and convex (the elytra being more rounded-off at the shoulders, and less parallel at the sides), by its more orbicular head and longer prothorax, and by its femora being clavated at their apex. In some of the species (as in the only Madeiran representative of the group), the males are distinguished from the females by having their anterior thighs armed internally with a short but robust spine, and by the terminal segment of their abdomen being slightly scooped-out beneath.

471. Formicomus pedestris.

F. niger nitidus parce griseo-villosus, prothorace picescentiore, elytris fasciâ transversâ abbreviatâ læte ferrugineâ pone humeros ornatis, antennis femoribusque ad basin ferrugineis.
Mas, capite vix majore, elytris paulo longioribus, necnon femoribus anticis intus spinâ munitis.
Long. corp. lin. $1\frac{2}{3}$–2.

Carabus pedestris, *Rossi, Fna Etrusc.* i. 224 (1790).
Anthicus pedestris, *Fab., Syst. Eleu.* i. 291 (1801).
—— ——, *Schmidt, Stett. Ent. Zeit.* iii. 193 (1842).
Formicomus pedestris, *La Ferté, Mon. des Anth.* 76 (1848).

F. black, shining, and sparingly clothed with long griseous hairs (some of which are erect, and others decumbent). *Head* suborbicular, rather closely punctured, and somewhat roughened. *Prothorax* long, and much constricted behind; a little more diluted, or piceous, than the rest of the surface; and more sparingly punctured than the head. *Elytra* oval, and still more remotely and finely punctulated; ornamented a little behind the base with a bright rufo-ferruginous transverse fascia, which does not extend however across the suture nor join the lateral margin,—the two broken portions, moreover, of which it is constituted being placed rather obliquely; the paler pubescence (which is decumbent) forming an obscure transverse postmedial band, and another, still more indistinct, towards the base. *Limbs* long. *Antennæ at base* dull-, and *femora at base* bright-ferruginous.

Male with the head a little larger than in the female sex, and with the elytra rather longer; the anterior thighs, moreover, armed beneath with a small, but robust, tooth.

The Madeiran specimens of the *F. pedestris* have their prothorax a little darker than is usual,—it being at times scarcely more diluted in colouring than the rest of the surface. It is an abundant insect throughout Mediterranean latitudes, occurring from Spain to the Crimea, and being recorded also in the north of Africa, in Asia Minor, Syria, and Persia. It was discovered in Madeira by Edmund Leacock, Esq.,—in the garden of the Quinta dos Padres at S. Antonio, near Funchal, during September 1855; and was subsequently taken by myself in the same locality.

Genus 200. **ANTHICUS.**

Paykull, *Fna Suec.* i. 253 (1798).

472. **Anthicus floralis***.

A. niger nitidus glabriusculus dense subtiliter punctulatus, prothorace (præsertim postice) picescentiore, elytris ad basin, antennis pedibusque pallidioribus.

Long. corp. lin. $1\frac{1}{2}$–$1\frac{3}{4}$.

Meloë floralis, *Linn., Fna Suec.* 830 (1735).
Anthicus floralis, *Fab., Syst. Eleu.* i. 29 (1801).
—— ——, *Schmidt, Stett. Ent. Zeit.* iii. 131 (1842).
—— ——, *La Ferté, Mon. des Anth.* 150 (1848).

A. black (sometimes with a brownish tinge), shining, comparatively free from pubescence (though, when highly magnified, an excessively minute, decumbent pile is perceptible), and closely and delicately punctulated all over. *Head* large (particularly in the male sex), and greatly truncated posteriorly. *Prothorax* more diluted, or piceous, than the head,—especially behind, where it is often brightly ferruginous. *Elytra* a little expanded behind the middle;

and more or less brightly ferruginous at the base. *Limbs* piceo-ferruginous, the *femora* being generally a little darkened.

A single specimen of the common *A. floralis*, which occurs (probably by introduction, through human agency) in nearly all parts of the civilized world, was detected by myself in Mr. Leacock's garden at the Quinta dos Padres, near Funchal, during September 1855; and four more (likewise found near Funchal) have been lately communicated to me,—namely, three by Mr. Bewicke, and one by Mr. Mason. It abounds throughout the whole of Europe; and is recorded from Algeria, Egypt, North and South America, the West Indies, and the Cape of Good Hope.

473. Anthicus instabilis.

Anthicus instabilis (*Hoffm.*), *Dej., Cat.* 217 (1836).
—— tibialis, *Curt.* [nec *Waltl*, 1835], *Brit. Ent.* 714 (1838).
—— mauritanicus, *Lucas, Rev. Zool.* 146 (1841).
—— instabilis, *Schmidt, Stett. Ent. Zeit.* iii. 184 (1842).
—— tibialis, *La Ferté* [sed vid. p. 305], *Mon. des Anth.* 165 (1848).
—— instabilis, *Woll., Ins. Mad.* 534 (1854).

Inhabits Madeira and Porto Santo; occurring beneath stones in dry, sunny spots of low and intermediate elevations.

474. Anthicus litoralis.

Anthicus litoralis (*Heer*), *Woll., Ins. Mad.* 535 (1854).

Inhabits Madeira proper; occurring sparingly, at low elevations, with the last species.

475. Anthicus crinitus.

A. gracilis niger nitidus cinereo-pilosus, prothorace angusto rufo-ferrugineo, elytris profunde punctatis antice ferrugineis et maculâ posticâ communi ferrugineâ ornatis, antennis pedibusque testaceis, femoribus ad apicem plus minus picescentibus.
Long. corp. lin. $1\frac{1}{3}$–$1\frac{1}{2}$.

Anthicus crinitus, *La Ferté, Mon. des Anth.* 204 (1848).

A. slender, black, shining, and clothed with a coarse, decumbent, pale-cinereous pile. *Head* slightly piceous, and almost impunctate. *Prothorax* narrow, more or less brightly rufo-ferruginous, and a little more evidently punctured than the head,—the punctures however being small and distant. *Elytra* much more deeply punctured; broadly ferruginous anteriorly, and with a somewhat rounded ferruginous patch, common to both, behind the middle. *Limbs* slender, and testaceous; the *femora* being more or less piceous at the apex.

The present species somewhat approaches at first sight the *A.*

hispidus; but its more slender form, rather paler and less punctured head, and its freedom from the long, erect pile which distinguishes that species, will, in conjunction with the ferruginous postmedial patch of its elytra, at once separate it therefrom. It was detected by myself, on the 1st of September 1855, at the Praya Formoza, in the south of Madeira proper,—from whence I obtained several specimens, running in and out of the crevices of the damp clayey soil behind the sea-beach; and I subsequently captured a single example (on the wing) in Mr. Phelps's garden at Funchal. It is recorded by La Ferté as a native of Egypt and Senegal.

476. Anthicus hispidus.

Notoxus hispidus, *Rossi, Mant.* i. 46 (1792).
Anthicus hispidus, *Schmidt, Stett. Ent. Zeit.* iii. 132 (1842).
—— ——, *La Ferté, Mon. des Anth.* 209 (1848).
—— ——, *Woll., Ins. Mad.* 535 (1854).

Inhabits Madeira and Porto Santo; occurring beneath stones, principally at rather low elevations. In the latter island it is apparently very scarce; but in Madeira proper it abounds in certain spots above Funchal.

477. Anthicus Lubbockii.

Anthicus tristis, *Woll.* [nec *Schmidt*, 1842], *Ins. Mad.* 536 (1854).

Inhabits the mountains of Madeira proper; abounding, beneath stones, on the open grassy slopes of the loftiest elevations. It was referred, by mistake, in the *Insecta Maderensia*, to the *A. tristis* of Schmidt; nevertheless it is totally distinct therefrom,—as I am now enabled to state positively through the kindness of my friend Dr. Schaum of Berlin, who has forwarded me typical specimens of Schmidt's species (collected by himself in the south of France) to compare with it. It approaches nearer indeed to the *fenestratus* of Schmidt; but it is smaller, and more finely punctured, than that insect; the punctures on its head and prothorax, although exceedingly close, are more regular and defined (being less interspersed with granules, or raised points); its head is *very much rounder posteriorly*; its prothorax is longer, and less constricted behind; its elytra are more parallel at their sides, altogether less oval, and *usually* quite immaculate; its pubescence is of a somewhat yellower or less silvery tinge; and its antennæ, tibiæ and tarsi are generally of a rather paler hue. I have dedicated it to my friend John Lubbock, Esq., whose microscopic researches in the higher departments of entomological science have thrown so much light on some of the obscurer questions of insect physiology.

Genus 201. XYLOPHILUS.

(Bonelli) Latreille, *Fam. Nat.* 383 (1825).

478. Xylophilus pallescens.

Xylophilus pallescens, *Woll., Ins. Mad.* 538. tab. xiii. f. 3 (1854).

Inhabits Madeira proper; occurring sparingly in the houses and gardens of Funchal.

Sectio XIII. BRACHELYTRA.

Fam. 58. SCYDMÆNIDÆ.

Genus 202. SCYDMÆNUS.

Latreille, *Gen. Crust. et Ins.* i. 232 (1806).

479. Scydmænus Helferi.

Scydmænus Helferi, *Schaum, Anal. Ent. (Dissert. inaug.)* 7 (1841).
—— ——, *Lucas, Col. de l'Algérie*, 131 (1849).
—— ——, *Woll., Ins. Mad.* 539 (1854).

Inhabits Madeira proper; occurring beneath stones, and at the roots of grass, principally at intermediate elevations.

Fam. 59. PSELAPHIDÆ.

Genus 203. EUPLECTUS.

(Kirby) Leach, *Zool. Miscell.* (1817).

The discovery of the genus *Euplectus* in Madeira, during the summer of 1855, has introduced a new family into our Fauna,—the *Pselaphidæ*: and it will be sufficient, here, to state that it may be at once known from the *Scydmænidæ* (to which it is closely allied) by the very abbreviated elytra and slender trimerous feet of the minute insects which constitute it. In less apparent details, the *Pselaphidæ* are creatures of a very anomalous structure, their remarkable palpi (the maxillary pair of which are greatly elongated, and composed of from one to four joints, and the labial of from one to two), generally *single* claws, and largely developed paraglossæ, giving them a character peculiarly their own. They occur amongst moss, and beneath the bark of trees,—where they prey upon the minute *Acari* which abound in such positions.

The genus *Euplectus* is mainly distinguished by the elongated, narrow, and depressed bodies, and the fusiform terminal articulation of the maxillary palpi, of the species which it embraces,—and which have their (11-jointed) antennæ inserted in a groove under the margin of the forehead, and their tarsal ungues single.

480. **Euplectus intermedius**, n. sp.

E. rufo-testaceus nitidus pubescens vix punctatus, capite lato antice leviter transversim impresso necnon in fronte bifoveolato, prothorace in disco foveolâ impresso, basi profundius trifoveolato, elytris brevissimis, antennis pedibusque testaceis.
Long. corp. lin. $\frac{3}{4}$.

E. narrow, rather depressed, rufo-testaceous, slightly shining, pubescent, and almost impunctate,—some rather large but shallow punctures being alone perceptible at the sides of the head. *Head* wide; truncated, and rather convex, behind; with a lightly impressed transverse line between the antennæ, and two longitudinal impressions on the forehead,—which are suddenly shallower anteriorly, but deeply and abruptly commenced, causing two small rounded foveæ to appear on its disk. *Prothorax* with a narrow, abbreviated, central foveolet in front, and with three larger and deeper ones (which are joined by a transversely impressed line) behind. *Elytra* very short, with a line on each alongside the suture, and a longitudinal depression at either shoulder,—deep at its commencement, but becoming gradually evanescent about the middle. *Abdomen* with the first three segments broadly margined, and reflexed, at the sides. *Limbs* testaceous.

The present *Euplectus* combines, to a certain extent, the characters of the *E. Karstenii* and *signatus* of more northern latitudes, agreeing with the former in its broad head and more lightly impressed foveæ, but in its less parallel shoulders and almost unpunctured surface, with the latter. Its elytra, however, are rather shorter than in *either* of those species, and its frontal foveolets are rounder and more minute. Its head, although broad, is not quite *so* wide as that of the *Karstenii*; and its frontal foveolets, although smaller than in that insect, are better defined. From the *signatus*, on the other hand (with which it better agrees in general contour), it may be at once recognized by its larger and differently shaped head, by its foveæ being very much shallower, its pubescence a little less silvery, its surface somewhat duller, and by its antennæ being perhaps not quite so robust. A single specimen was detected, by myself, beneath the bark of a dead tree in the damp forest-district of the Lombo dos Pecegueiros (in the north of Madeira proper), during July 1855; and three more have been subsequently captured by Mr. Bewicke, at Campanario.

Fam. 60. STAPHYLINIDÆ.

(Subfam. 1. ALEOCHARIDES.)

Genus 204. FALAGRIA.

(Leach) Mannerheim, *Brachel.* 86 (1831).

481. Falagria obscura.

Aleochara obscura, *Grav., Col. Micropt.* 74 (1802).
Falagria obscura, *Mann., Brachel.* 87 (1831).
—— ——, *Erich., Gen. et Spec. Staph.* 54 (1839).
—— ——, *Woll., Ins. Mad.* 541 (1854).

Inhabits Madeira and Porto Santo; occurring in wet spots, and along the edges of the streams, at low and intermediate altitudes.

Genus 205. PHYTOSUS.

(Rudd) Curtis, *Brit. Ent.* xv. 718 (1838).

The little genus *Phytosus*, so well distinguished by its narrow, linear, and densely sericeous body, very abbreviated elytra, and rather wide head (which is quite as broad as the prothorax), is remarkable for its robust legs, strongly spinulose anterior tibiæ, and fossorial habits,—thus curiously calling to mind, at first sight, some of the *Oxytelides*. In all its essential characters, however, as the insertion of its antennæ, the number of its tarsal joints, elongated and porrected ligula, and the structure of its upper lip, it agrees with the members of the present Section; though its exact position therein has been a subject of some dispute,—Erichson having regarded it as closely akin to *Aleochara* proper (especially to the *A. obscurella*), whilst Kraatz has more recently brought it, on account of its greatly acuminated paraglossæ, into immediate contact with *Falagria* and *Autalia*; to which, moreover, in the apically subincrassated terminal joint of its labial palpi it would appear to be still further related. In its tetramerous fore-feet, it agrees with *Homalota*.

482. Phytosus nigriventris.

P. rufo-testaceus dense cinereo-pubescens, capite vix obscuriore, elytris brevissimis, abdomine (præsertim in medio) nigricante. Long. corp. lin. 1.

Phytosus spinifer ♂ [sed haud vere], *Curtis, Brit. Ent.* xv. 718 (1838).
—— —— ♀, *Erich., Gen. et Spec. Staph.* 178 (1839).
Myrmedonia nigriventris, *Chev., in Rev. Zool.* 42 (1843).
Phytosus nigriventris, *Kraatz, Stett. Ent. Zeit.* xiv. 257. tab. 3. f. 6 (1853).
—— ——, *id., Nat. der Ins. Deutsch.* ii. 43 (1856).

P. narrow, and rufo-testaceous. *Head, prothorax,* and *elytra* opake, and densely clothed with a short, decumbent, cinereous pubescence: the *first* oval, about as broad as the prothorax, and a little punctured and subgranulose behind: the *second* minutely and obscurely punctulated; and somewhat narrowed, as well as obsoletely channeled, posteriorly: the *last* exceedingly short, and still more obsoletely punctured. *Abdomen* a little widened behind, and more shining than the rest of the surface, being less densely covered with pubescence; more evidently punctured, and roughened, than the head and prothorax; and more or less darkened, especially in the middle, the apex and base being gradually paler. *Limbs* testaceous.

Two specimens of this insect were detected by myself in the island of Porto Santo,—burrowing into the sand-hills behind the southern beach, at the roots of *Arundo donax,*—during the spring of 1855. They have been carefully examined by Mr. Janson, who believes them to be identical with the *Myrmedonia nigriventris* of Chevrolat; and I am indebted to him for the opportunity of comparing them with examples from Berwickshire, from Swinemünde (on the shores of the Baltic), and from France,—with which they appear, to me also, unquestionably to agree. It would seem however to be a naturally variable species, as regards size and the greater or less intensity of its darker parts; and, judging from the representatives now before me, it is a trifle paler (and perhaps smaller) in Porto Santo than in our own country.

Genus 206. **TACHYUSA.**

Erichson, *Käf. der Mark Brand.* i. 307 (1837).

483. **Tachyusa raptoria.**

Tachyusa raptoria, *Woll., Ins. Mad.* 542 (1854).

Inhabits Madeira proper, occurring amongst wet shingle along the edges of the rivers and streams. Rare.

Genus 207. **CHILOPORA.**

Kraatz, *Nat. der Ins. Deutsch.* ii. 146 (1856).

Chilopora has been lately separated from *Calodera* by Kraatz,—to include a few species which dwell more peculiarly amongst shingle at the edges of streams, and in which the antennæ are slenderer, and the head more constricted behind, than in the typical *Caloderæ.* Their abdomen, also, is as closely and minutely punctulated as the rest of their surface; their inner maxillary lobe has only a few, rather

distant spinules *towards* its apex (whereas in that genus the apex itself is internally armed with six, closely-set ones); and their lower lip is altogether somewhat longer,—the ligula, moreover, being *un*emarginated in front, and the central (divergent) *laciniæ* narrow and acuminated. In common with the *Calodereæ*, however, the bodies of the *Chiloporæ* are densely (though delicately) pubescent; their tarsi are pentamerous, with the basal joint of the posterior pair considerably elongated; and their paraglossæ do not project beyond the anterior angles of their ligula.

484. Chilopora longitarsis.

C. nigra ubique subtilissime confertissimeque punctulata et dense cinereo-pubescens, prothorace basi profunde canaliculato, antennarum basi, palpis pedibusque testaceis, femoribus plus minus obscurioribus.
Long. corp. lin. 2.

Aleochara longitarsis (*Kby*), *Steph. Ill. Brit. Ent.* v. 110 (1832).
Calodera longitarsis, *Erich., Käf. der Mark Brand.* i. 698 (1839).
—— ——, *id., Gen. et Spec. Staph.* 66 (1839).
Chilopora longitarsis, *Kraatz, Nat. der Ins. Deutsch.* ii. 147 (1856).

C. black, very slightly shining, most minutely and closely punctulated all over, and densely clothed with a short, decumbent, cinereous pubescence. *Head* oval, and a little narrower than the thorax. *Prothorax* subquadrate, and rather deeply channeled behind,—the channel becoming evanescent anteriorly. *Antennæ at base, palpi*, and *legs*, testaceous: the *femora*, except at their extreme apex, more or less darkly picescent. *Antennæ at apex* blackish-brown.

The Madeiran specimens of the common *C. longitarsis* have their prothorax somewhat more evidently channeled than is usually the case in the British ones. The species is abundant in most parts of Europe (being recorded in Germany, England, France, Austria, Italy and Sardinia), but is apparently very rare in Madeira, where I detected three examples of it, at the end of June 1855, towards the upper extremity of the Ribeira de S^ta^ Luzia,—beneath stones at the edges of the stream.

Genus 208. XENOMMA.

Wollaston, *Ins. Mad.* 543. tab. xiii. f. 4 (1854).

It is possible that this genus may have, eventually, to be merged into *Oxypoda*; at least it is the opinion of Dr. Kraatz of Berlin that at any rate the *X. planifrons* (which alone I sent him for inspection) is not very distinct therefrom. Since, however, the three

species which constitute it differ so materially from the other *Madeiran Oxypodæ*, I have preferred retaining it as separate in this Catalogue,—deeming the present observation, concerning its affinities, sufficient.

485. **Xenomma planifrons.**

Xenomma planifrons, *Woll., Ins. Mad.* 544. tab. xiii. f. 4 (1854).

Inhabits the damp sylvan districts of Madeira proper; occurring amongst shingle, and fallen leaves, at the edges of the small trickling streams of a lofty elevation. Rare.

486. **Xenomma formicarum.**

Xenomma formicarum, *Woll., Ins. Mad.* 545 (1854).

Inhabits Madeira proper; occurring beneath logs of wood, and fallen leaves, at intermediate and lofty altitudes.

487. **Xenomma filiforme.**

Xenomma filiforme, *Woll., Ins. Mad.* 545 (1854).

Inhabits Madeira and Porto Santo; occurring at intermediate elevations.

Genus 209. **HOMALOTA.**

Mannerheim, *Brachel.* 73 (1831).

488. **Homalota truncorum,** n. sp.

H. nigra alutacea subtiliter pubescens et fere opaca, capite prothoraceque leviter obsolete punctatis, illo postice subquadrato, hoc rotundato antice truncato, elytris valde abbreviatis, abdomine nitidiore, ultra medium dilatato, antennis pedibusque picco-ferrugineis.
Long. corp. lin. 1–1$\frac{1}{8}$.

H. black, most densely alutaceous all over, and sparingly clothed with a minute pubescence, which is longer and coarser posteriorly than elsewhere. *Head, prothorax*, and *elytra* almost opake: the *first* rather more evidently punctured than the two latter (on which the punctures are only just perceptible even beneath the microscope), and squarish behind the *eyes*,—which are small, much depressed, and composed of only a few lenses: the *second* of about the same breadth as the head, round behind, and truncated in front: the *third* exceedingly abbreviated, and somewhat emarginate (conjointly) along their posterior edge. *Abdomen* a little more shining, and less alutaceous, than the rest of the surface, and a good deal expanded beyond the middle. *Limbs* short, pubescent, and picco-ferruginous; the *antennæ* rather darker towards their extremity.

The minute size, posteriorly expanded outline, and dark hue of

this curious little *Homalota* †, in conjunction with its apterous body, densely alutaceous surface, subquadrate head, and its much abbreviated elytra and limbs, will readily distinguish it from every other species with which we are here concerned. It appears to be exceedingly rare, and confined to the upper limits of the sylvan districts of Madeira proper,—where it was detected by myself, amongst the earth and vegetable refuse which had accumulated in the hollows (and between the junction of the stems) of old trees, at the Cruzinhas and Fanal (nearly 5000 feet above the sea), during July 1855.

489. **Homalota sanguinolenta.**

Homalota sanguinolenta, *Woll., Ins. Mad.* 547 (1854).

Inhabits Madeira proper; abounding beneath logs of wood, fallen leaves, &c., throughout the sylvan districts.

490. **Homalota haligena,** n. sp.

H. subcylindrica fusco-brunnea nitida, capite nigro, prothorace convexo, abdomine plus minus nigrescenti, antennarum basi pedibusque testaceis.
Long. corp. lin. 1–1¼.

H. subcylindrical, rusty-brown, shining, clothed with a rather robust, decumbent, paler pubescence, and apterous. *Head* black, and very finely and remotely punctulated. *Prothorax* convex, only slightly broader than the head and elytra, and most delicately margined,—the margin being scarcely distinguishable except beneath the microscope. *Elytra* much abbreviated. *Abdomen* almost as dark as the head,—all the segments except the apical ones, and the extreme hinder margins of the others, being black. *Antennæ at base,* and the *legs,* testaceous.

Closely allied to the *H. sanguinolenta,* so abundant throughout the sylvan districts of Madeira proper, of which I had at first imagined it might possibly prove to be but a stunted, darker variety, peculiar to the more barren islands of the group. A careful examination, however, has convinced me that it is truly distinct,—though in its greatly abbreviated elytra and apterous body it has much in common with that species. It differs from the *sanguinolenta* in being smaller, more cylindric, shining, and convex; in its antennæ being (proportionably) somewhat shorter, and its prothorax not quite so wide; in its pubescence being a little more robust and regular; its entire surface darker than even the dull, or typical, state of that insect (the paler portions being rusty-brown, instead of rufo-testaceous); and

† I may add that it has been examined by Dr. Kraatz, of Berlin, who returned it as "*Homalota* n. sp., vix *nov. gen.*"

in its head being less perceptibly *alutaceous*, beneath the microscope, and more remotely punctulated.

I first detected it on the rocky declivities just below the summit of the Pico Branco, in the north of Porto Santo, early in May 1855, —where it was tolerably abundant amongst the earth at the roots of grass; though, from its habit of secreting itself in the soil, it was not easy to procure. And in the following month I obtained a single specimen from beneath a stone on the Ilheo Chão; as also a considerable number on the Southern Dezerta, or Bugio (on the steep, sloping buttresses immediately to the south of the cavern), under precisely similar circumstances as in Porto Santo. It has been examined by Dr. Kraatz, of Berlin, who regards it as undoubtedly new.

491. **Homalota granulosa.**

Homalota granulosa, *Woll., Ins. Mad.* 548 (1854).

Inhabits Madeira proper, occurring in moist places throughout the sylvan districts,—though principally at a lofty elevation. Rare.

492. **Homalota obliquepunctata.**

Homalota obliquepunctata, *Woll., Ins. Mad.* 549 (1854).

Inhabits Madeira proper, occurring amongst shingle at the edges of the streams at intermediate altitudes.

493. **Homalota luridipennis.**

Bolitochara luridipennis, *Mann., Brachel.* 77 (1831).
Homalota elongatula, *Erich., Gen. et Spec. Staph.* 90. var. C. *a* (1839).
—— luticola, *Woll., Ins. Mad.* 549 (1854).
—— luridipennis, *Kraatz, Nat. der Ins. Deutsch.* ii. 221 (1856).

Inhabits Madeira proper; occurring sparingly amongst the wet soil at the roots of *Marchantia polymorpha*, L., and other plants, at the edges of the waterfalls (especially in the north of the island). The title of *luticola*, under which I described it in the *Insecta Maderensia*, has to sink into a synonym,—my original specimens having been subsequently examined by Dr. Kraatz, who has identified them with the *luridipennis* of Mannerheim.

494. **Homalota gregaria.**

Homalota gregaria, *Erich., Gen. et Spec. Staph.* 87 (1839).
Tachyusa immunita, *id., Gen. et Spec. Staph.* 916 (1839).
Homalota gregaria, *Redt., Fna Austr.* 659 (1849).
—— ——, *Woll., Ins. Mad.* 550 (1854).

Inhabits Porto Santo, abounding amongst stones and shingle at the edges of the streams.

495. Homalota Philonthoides.

Homalota Philonthoides, *Woll., Ins. Mad.* 551. (1854).

Inhabits Madeira proper, occurring in sylvan spots of a lofty elevation. It approaches very closely, in size, outline, and sculpture, to the *H. gregaria*, which is so abundant along the edges of the streams in Porto Santo; nevertheless it is a little less shining and depressed than that species, its head and prothorax are a trifle smaller, its antennæ are slenderer (especially at the base, where they are distinctly rufo-ferruginous), its pubescence is somewhat coarser, its elytra are scarcely more diluted in colouring than the rest of the surface, and its legs are usually entirely pale,—whereas in the *gregaria* the femora are more or less infuscated.

496. Homalota palustris.

Homalota palustris, *Kiesw., Stett. Ent. Zeit.* v. 318 (1844).
—— brunnipes, *Muls., Opusc. Ent.* i. 20.
—— currens, *Woll., Ins. Mad.* 552 (1854).
—— palustris, *Kraatz, Nat. der Ins. Deutsch.* ii. 309 (1856).

Inhabits Madeira proper; abounding at the edges of the streams, and in other damp spots, at intermediate elevations. Since the publication of the *Insecta Maderensia* I have forwarded specimens to Berlin, for examination by Dr. Kraatz; and since they appear to be specifically coincident with the *palustris* of Kiesenwetter, the name of *currens* has to be suppressed.

497. Homalota Thinobioides.

H. angusto-linearis valde depressa nigra subnitida pubescens subtilissime confertissimeque alutacea, capite confertim subpunctato, prothorace subquadrato profunde canaliculato, antennis gracilibus fuscis, pedibus brevibus saturate testaceis.
Long. corp. lin. 1–1¼.

Homalota Thinobioides, *Kraatz, Stett. Ent. Zeit.* xv. 125 (1854).
—— ——, *id., Nat. der Ins. Deutsch.* ii. 228 (1856).

H. narrow and linear (the sides being almost parallel), exceedingly depressed, black, and densely clothed with a short and fine pubescence. *Head*, *prothorax*, and *elytra* but very slightly shining, and (appearing beneath the microscope) most closely and delicately alutaceous all over,—the head alone (which is rather large and subquadrate) being, in addition, densely (though lightly) punctulated. *Prothorax* about as wide as the head, subquadrate (being but slightly narrowed behind), and broadly channeled down the disk. *Elytra* generally a trifle paler (or more fuscescent) than the head and prothorax. *Abdomen* comparatively shining, and densely

subpunctulated and alutaceous all over. *Antennæ* long, slender, and fuscous. *Legs* short, and diluted-testaceous.

Readily known by its minute size and narrow, parallel outline, by its much depressed and finely pubescent body, its long and slender antennæ, and by its deeply channeled prothorax. It resides amongst the wet shingle at the edges of the streams,—under which circumstances I captured it, abundantly, in the Ribeira de São Vincente (in the north of Madeira proper), during July 1855. It has been examined by Dr. Kraatz, and identified with his *H. Thinobioides*, of the *Insecten Deutschlands*.

498. **Homalota analis.**

Aleochara analis, *Grav.*, *Col. Micropt.* 76 (1802).
Bolitochara evanescens, *Mann.*, *Brachel.* 81 (1831).
Homalota analis, *Erich.*, *Gen. et Spec. Staph.* 114 (1839).
—— tantilla, *Woll.*, *Ins. Mad.* 553 (1854).
—— analis, *Kraatz*, *Nat. der Ins. Deutsch.* ii. 256 (1856).

Inhabits Madeira proper, occurring under vegetable refuse at intermediate and lofty altitudes. The name of *tantilla*, proposed for it in the *Insecta Maderensia*, must be suppressed, the species having been satisfactorily shown by Dr. Kraatz to be but a small state of the common European *H. analis*.

499. **Homalota plebeia.**

Homalota plebeia, *Woll.*, *Ins. Mad.* 553 (1854).

Inhabits Madeira proper, occurring sparingly at most elevations. It is possible that this species may be referable to the *H. clientula* of Erichson; nevertheless since Dr. Kraatz, to whom it was submitted for inspection, was not quite certain that such should be the case†, and since the specimens which I sent him for examination were not altogether satisfactory ones, I have thought it desirable (at any rate for the present) not to identify it with that insect.

500. **Homalota montivagans,** n. sp.

H. linearis piceo-nigra remote punctulata nitida convexa, prothorace obsolete canaliculato ad latera subæqualiter rotundato, elytris circa humeros leviter rufescentibus, antennis fusco-piceis, pedibus pallido-testaceis.
Long. corp. lin. $1\frac{1}{2}$.

H. linear, piceous-black. *Head* and *prothorax* distinctly but remotely punctulated (the latter *very* remotely so), and with scarcely any

† "Colore tantum," says he, "ab *H. clientula*, Er., differt; *verisimile cum hac conjungenda*."

appearance of an *alutaceous* sculpture, even beneath the microscope, shining, coarsely pubescent, and rather convex. *Prothorax* very convex; almost equally rounded at the sides, and therefore broadest about the middle; and with faint indications of a dorsal channel. *Elytra* slightly rufescent about the shoulders. *Abdomen* but faintly diluted in colouring at its apex. *Antennæ* and *legs* of moderate length; the *former* rather robust, and brownish-piceous (their base being scarcely paler than the rest of the joints); the *latter* pale testaceous.

The above *Homalota* is apparently a good deal allied to the *plebeia*; nevertheless it is rather larger and more shining than that insect; its prothorax is convexer, not quite so short, more equally rounded at the sides (and therefore less truncated in front), obscurely channeled, much less evidently alutaceous, and with its punctures more remote; its shoulders are slightly rufescent; and its limbs are somewhat paler. A single specimen of it was captured during May 1856 on the Pico dos Arieros, of Madeira proper, by Mr. Bewicke (by whom it was presented to the British Museum),—at an elevation of nearly 6000 feet above the sea.

501. **Homalota coriaria.**

Homalota sodalis, *Woll.* [nec *Erich.*, 1837], *Ins. Mad.* 554 (1854).
—— coriaria (*Miller*), *Kraatz, Nat. der Ins. Deutsch.* ii. 282 (1856).

Inhabits Madeira proper; occurring principally at low elevations, and often abounding in the gardens of Funchal. It was wrongly referred to the *sodalis* of Erichson, in the *Insecta Maderensia*; on which fact Dr. Kraatz, to whom I subsequently sent it for inspection, makes the following remark: "*H. coriaria*, mihi, nec *H. sodalis* ab Erichsone descripta. Differt punctaturâ subtiliore, staturâ minore, et masculorum structurâ abdominis."

502. **Homalota umbratilis.**

Homalota umbratilis, *Woll.*, *Ins. Mad.* 554 (1854).

Inhabits Madeira proper, and is hitherto unique,—the single specimen having been captured by myself in the north of the island, during July 1850.

503. **Homalota alutaria,** n. sp.

H. linearis, nigra, rugose alutacea, sat dense et distincte punctulata, minus nitida, subdepressa, prothorace ad latera rotundato necnon postice in medio leviter impresso, elytris diluto-testaceis, circa

angulos posticos externos fuscescentibus, antennis brevibus gracilibus, basi pedibusque testaceis.
Long. corp. lin. 1–1⅛.

H. linear, black, densely and coarsely alutaceous and rather closely punctulated, very slightly shining (the head and prothorax being almost opake), pubescent, and somewhat depressed. *Head* rather broad, and slightly acuminated between the antennæ,—the mouth being prominent. *Prothorax* with the sides rounded; and with a broad, though shallow, central depression behind. *Elytra* rather wide; straightened at the sides; diluted-testaceous, and more or less infuscated towards the outer hinder angle. *Abdomen* a little paler at its apex. *Antennæ* short and slender; with their apical joint rounder and less elongated, and the subapical ones more transverse and perfoliated, than in any of the allied (Madeiran) species: their *base*, and the *legs*, pale testaceous.

The coarsely alutaceous, and rather densely punctured, surface of the present *Homalota*, in conjunction with its somewhat depressed body, diluted-testaceous elytra, and the rather peculiar structure of its short and slender antennæ, will, *inter alia*, distinguish it from its allies. Two specimens only have hitherto come beneath my notice; they were taken by Mr. Mason in Madeira proper, and (I believe) in the upland region of the Fanal.

504. **Homalota insignis.**

Homalota insignis, *Woll., Ins. Mad.* 555 (1854).

Inhabits Madeira proper; occurring in fungi, and beneath the loosened bark of trees, throughout the sylvan districts.

505. **Homalota atramentaria.**

Aleochara atramentaria (*Kirby*), *Gyll., Ins. Suec.* ii. 408 (1810).
Homalota atramentaria, *Erich., Gen. et Spec. Staph.* 111 (1839).
—— ——, *Woll., Ins. Mad.* 555 (1854).
—— ——, *Kraatz, Nat. der Ins. Deutsch.* ii. 303 (1856).

Inhabits Madeira and Porto Santo; occurring in the dung of cattle, principally at intermediate and lofty altitudes.

506. **Homalota longicornis*.**

Aleochara longicornis, *Grav., Col. Micropt.* 87 (1802).
Homalota longicornis, *Erich., Gen. et Spec. Staph.* 129 (1839).
—— ——, *Woll., Ins. Mad.* 556 (1854).
—— ——, *Kraatz, Nat. der Ins. Deutsch.* ii. 301 (1856).

Inhabits Madeira proper; occurring in the dung of cattle, at most elevations.

507. **Homalota lividipennis***.

Oxypoda lividipennis, *Mann.*, *Brachel.* 70 (1831).
Homalota lividipennis, *Erich.*, *Gen. et Spec. Staph.* 129 (1839).
—— ——, *Woll.*, *Ins. Mad.* 557 (1854).
—— ——, *Kraatz*, *Nat. der Ins. Deutsch.* ii. 311 (1856).

Inhabits Madeira and Porto Santo; occurring in the dung of cattle, in similar places as the last species.

Genus 210. **OXYPODA.**

Mannerheim, *Brachel.* 69 (1831).

508. **Oxypoda lurida**, n. sp.

O. lineari-fusiformis fusco-testacea sericeo-pubescens subnitida crebre subtiliter punctulata, capite abdominisque segmentis intermediis nigricantibus, prothorace convexo postice lato, elytris plus minus inæqualiter fuscescentibus, antennarum basi, palpis pedibusque testaceis.
Long. corp. lin. $1\frac{1}{4}$–$1\frac{1}{2}$.

O. linear-fusiform and narrow, dull brownish-testaceous, very slightly shining, minutely and closely punctulated all over, and densely clothed with a fine, sericeous, decumbent pubescence. *Head* and more or less of the *abdomen* (except the apex, and the hinder margins of the segments) blackish: the *former* subrotundate, and less closely punctured than the rest of the surface. *Prothorax* convex, rather compressed in front, and almost as broad behind as the elytra. *Elytra* usually a little more fuscescent than the prothorax,—at any rate about the scutellum, suture, and lateral margins. *Antennæ* about as long as, or a little shorter than, the head and prothorax; fuscous: their *base*, the *palpi*, and the *legs*, testaceous.

The *Oxypoda* from which I have compiled the above diagnosis was identified by Dr. Kraatz with the *exoleta* of Erichson; nevertheless it does not appear to me to accord entirely with the description of that insect, nor with a series of *specimens* collected by myself in the Isle of Wight and in Huntingdonshire; and I have consequently regarded it as a new, though a nearly allied, species. It differs from the *exoleta* in having its antennæ a little more robust, its head and prothorax rather longer, its elytra very perceptibly longer, and its entire outline not quite so narrow. It was detected by myself in Madeira proper, where it is exceedingly rare, during the summer of 1845. It occurs beneath stones and fallen leaves, in the damp ravines of intermediate altitudes; and in such positions I captured it towards the upper extremity of the Ribeira de S^{ta} Luzia, in the

Ribeira d'Escalas, and at the head of the S^ta^ Cruz ravine at S. Antonio da Serra.

509. **Oxypoda rugifrons.**

Oxypoda litigiosa, *Woll.* [nec *Heer*, 1841], *Ins. Mad.* 558 (1854).

Inhabits Madeira proper, occurring sparingly (I believe, in the dung of cattle) around Funchal. There are few insects which have given me more trouble than this obscure little *Oxypoda*. In 1854 I referred it to the *litigiosa* of Heer, with specimens of which, in my possession (from the collection of M. Chevrier of Geneva), it appeared to me sufficiently to coincide; and from which, even now, I do not consider that it is specifically far removed. Since that species, however, is referred by Kraatz to the *cuniculina* of Erichson (=*brevicornis*, Sturm), and since the Madeiran one is *certainly* distinct from the *cuniculina* (as I have completely satisfied myself from the most accurate examination of a recent series of the latter, determined by Dr. Kraatz and revised by Mr. Waterhouse), it is just possible that my Swiss examples may be wrongly identified with the *litigiosa*,—for I will not suppose that Kraatz was mistaken in assigning Heer's insect† to the *cuniculina*. Be this however as it may, the Madeiran species presents, I think (on a closer inquiry), sufficient characters to warrant its removal from even the Swiss one, and therefore *à fortiori* from *cuniculina* proper. From the first, its more roughly sculptured head, anteriorly narrowed prothorax, and more rounded shoulders, principally distinguish it; whilst from the second, its much smaller bulk and more fusiform outline, in conjunction with its more opake and darker surface, its less robust antennæ, and the totally different sculpture of its head (which is as densely punctured as, and more rugosely than, the prothorax,—instead of being comparatively remotely so, and with the punctures well defined), will at once serve to characterize it.

Genus 211. **ALEOCHARA.**

Gravenhorst, *Col. Micropt.* 67 (1802).

510. **Aleochara puberula*.**

Aleochara puberula, *Klug, Col. Madagasc.* 51 (1833).
—— ——, *Erich., Gen. et Spec. Staph.* 165 (1839).
—— Armitagei, *Woll., Ins. Mad.* 559 (1854).

Inhabits Madeira and Porto Santo; occurring in the dung of cattle

† I may state, however, that *if my specimens* from M. Chevrier's collection *be rightly determined*, I have but little doubt that Heer's insect *is* specifically distinct from Erichson's,—its smaller size, and the closer sculpture of its more posteriorly truncated head, seeming to imply, apart from other characters, that it should scarcely be referred to the *cuniculina*.

within the inhabited districts, and principally at low elevations. It is on the authority of the last edition of the Stettin Catalogue (1856) that I have assigned the name of *puberula* to this *Aleochara*,—with the description of which, however, in Erichson's *Genera et Species Staphylinorum*, it agrees sufficiently well. The fact of its having been recorded by Klug amongst the Coleoptera of Madagascar is not so surprising as at first sight might appear, since there are few insects more liable to artificial transport than the *Aleocharæ* (some of which have established themselves in the most distant parts of the world); and it is very possible therefore that it may have been accidentally naturalized in that island during the period of its commercial intercourse with Europe. It is found also, I am informed by Dr. Kraatz, in Italy; and I may add that it has all the appearance of having been introduced, within a comparatively recent period, into the Madeiras.

511. **Aleochara tristis.**

Aleochara tristis, *Grav.*, *Mon.* 170 (1806).
—— ——, *Erich.*, *Gen. et Spec. Staph.* 162 (1839).
—— ——, *Woll.*, *Ins. Mad.* 560 (1854).
—— ——, *Kraatz*, *Nat. der Ins. Deutsch.* ii. 89 (1856).

Inhabits Madeira and Porto Santo, occurring in the dung of cattle at low and intermediate elevations.

512. **Aleochara mœsta.**

A. sublinearis atra nitida pubescens, prothorace crebre æqualiter punctulato, elytris concoloribus, antennis longiusculis, basi femoribusque piceis, tibiis tarsisque picco-testaceis.
Long. corp. lin. 2.

Aleochara mœsta, *Grav.*, *Col. Micropt.* 96 (1802).
—— fumata, *Gyll.*, *Ins. Suec.* ii. 434. var. *c* (1810).
—— mœsta, *Erich.*, *Gen. et Spec. Staph.* 170 (1839).
—— ——, *Kraatz*, *Nat. der Ins. Deutsch.* ii. 99 (1856).

A. sublinear, deep-black, shining, and coarsely pubescent. *Head* and *prothorax* uniformly punctured all over, but with the punctures more numerous on the latter than on the former. *Elytra* a little more closely and coarsely punctured than the prothorax, and concolorous. *Abdomen* with its upper surface only slightly punctured. *Antennæ* rather long; robust at their apex: their *base*, and the *femora*, piceous. *Tibiæ* and *tarsi* picco-testaceous.

The single specimen (now in the British Museum) from which the above description is compiled, and which has been identified by Dr. Kraatz with the European *A. mœsta*, was detected by myself in the Ribeira de S^{ta} Luzia (in the south of Madeira proper), during the

summer of 1855. Its uniformly dark hue (its legs and base of antennæ being alone more or less piceo-testaceous), in conjunction with its rather large size and regularly punctulated head and prothorax, will suffice to distinguish it from the other *Aleocharæ* here enumerated.

513. Aleochara nitida.

Aleochara nitida, *Grav., Col. Micropt.* 97 (1802).
—— ——, *Erich., Gen. et Spec. Staph.* 168 (1839).
—— ——, *Woll., Ins. Mad.* 560 (1854).
—— ——, *Kraatz, Nat. der Ins. Deutsch.* ii. 105 (1856).

Inhabits Madeira, Porto Santo, and the Dezerta Grande; occurring principally in the dung of cattle, at nearly all altitudes.

514. Aleochara binotata.

A. sublincaris subænescenti-atra nitidissima fortius pubescens, prothorace in medio profundius biseriatim punctato, elytris profunde punctatis, singulo maculâ magnâ rufo-testaceâ (ad angulum internum sitâ et plus minus suffusâ) læte ornato, antennis brevibus, basi pedibusque piceis, tarsis piceo-testaceis.
Long. corp. lin. 1–1¾.

Aleochara binotata, *Kraatz, Nat. der Ins. Deutsch.* ii. 106 (1856).

A. similar to the *A. nitida*, but (on the average) rather smaller, a trifle more subænescent (or a little less intensely black), and with the pubescence perhaps somewhat denser and paler. *Head* and *prothorax* more deeply punctured than in that insect, but with the same character of punctuation. *Elytra*, likewise, a little more coarsely punctured than in the *A. nitida*; and with the apical patch generally larger, brighter, and more suffused. *Abdomen* somewhat more thickly punctured than in that insect. *Antennæ* a little shorter, with their base piceous. *Legs* altogether a trifle more piceous, and with the *feet* more evidently testaceous.

The present *Aleochara* approaches very closely to the *A. nitida*; and it may perhaps be questionable whether it is more than a mere phasis of that insect. It can be usually separated therefrom, however, without much difficulty; and it is to Dr. Kraatz that I am indebted for pointing out to me its characters (such as they are) in one of my Porto-Santan specimens. It is stated by him to occur in the north of Germany: and I first captured it in the Madeiras during the spring of 1848,—when I obtained a single example in the island of Porto Santo, in company with the *A. nitida*. That specimen, however, was mixed-up with my series of the latter, and was not separated therefrom until quite recently,—when the examination of a fresh supply of both species (collected in Porto Santo, in 1855,—

where they occur on the sand-hills behind the sea-beach) at once enabled me, with the aid of Dr. Kraatz's diagnosis, to distinguish it from the remainder.

515. **Aleochara morion.**

Aleochara morion, *Grav., Col. Micropt.* 97 (1802).
—— —— et exigua, *Mann., Brachel.* 68 (1831).
—— ——, *Erich., Gen. et Spec. Staph.* 175 (1839).
—— ——, *Woll., Ins. Mad.* 561 (1854).
—— ——, *Kraatz, Nat. der Ins. Deutsch.* ii. 108 (1856).

Inhabits Madeira proper, occurring in the dung of cattle at low and intermediate elevations. The sexes of this insect would appear to differ slightly in the structure of their antennæ, which in the males (?) is rather longer and slenderer than in the females; and, according to Erichson, it was to the former that Mannerheim gave the name of *exigua*.

Genus 212. **OLIGOTA.**

Mannerheim, *Brachel.* 72 (1831).

516. **Oligota pusillima.**

O. linearis angustula nigro-picea subtiliter pubescens subnitida, prothorace convexo coleopteris haud angustiore, antennarum basi pedibusque diluto-testaceis.
Long. corp. lin. vix $\frac{1}{2}$.

Aleochara pusillima, *Grav., Col. Micropt.* 175 (1802).
Oligota pusillima, *Mann., Brachel.* 72 (1831).
—— ——, *Erich., Gen. et Spec. Staph.* 179 (1839).
—— ——, *Kraatz, Nat. der Ins. Deutsch.* ii. 347 (1856).

O. a little smaller, narrower, and more linear than the *O. inflata*; also generally somewhat darker (or of a less *brownish*-piceous hue), and not quite so coarsely pubescent. *Prothorax* rather less narrowed anteriorly than in that species. *Elytra* with the sides a little more parallel than in the *O. inflata*, and about as broad as (instead of, as there, a trifle broader than) the prothorax; conjointly a good deal scooped-out behind (considerably more so than in that insect). *Abdomen* less perceptibly dilated at its apex than in the *O. inflata*. *Antennæ* a little shorter, and more compact, than in that species, and with their *apical three* joints forming a rather more decided club; ferruginous: their *base*, and the *legs*, diluted-testaceous.

Whilst compiling the *Insecta Maderensia*, I overlooked the present species amongst specimens of the following one. It is, I believe, rightly referred to the *pusillima* of Gravenhorst, as its ally is to the

inflata of Mannerheim. It occurs beneath stones and vegetable refuse (principally at low elevations), both in the north and south of Madeira proper; but I have not as yet detected it on any of the other islands of the group. My specimens are from the vicinity of Funchal (the Gorgulho and Cabo Gerajão), and the lower extremity of the Ribeira da Janella.

517. **Oligota inflata.**

Microcera inflata, *Mann., Brachel.* 72 (1831).
Oligota subtilis, *Erich., Gen. et Spec. Staph.* 180 (1839).
—— inflata, *Woll., Ins. Mad.* 562 (1854).
—— ——, *Kraatz, Nat. der Ins. Deutsch.* ii. 348 (1856).

Inhabits Madeira and Porto Santo; occurring beneath stones, vegetable refuse, and at the roots of grass, generally at low elevations.

(Subfam. 2. TACHYPORIDES.)

Genus 213. **SOMATIUM.**

Wollaston, *Ins. Mad.* 563. tab. xiii. f. 5 (1854).

518. **Somatium anale.**

Somatium anale, *Woll., Ins. Mad.* 563. tab. xiii. f. 5 (1854).

Inhabits Madeira proper; occurring, in fungi, throughout the damp sylvan districts of intermediate altitudes. Exceedingly rare.

Genus 214. **CONURUS.**

Stephens, *Ill. Brit. Ent.* v. 188 (1832).

519. **Conurus pubescens.**

Staphylinus pubescens, var. β, *Payk., Mon. Carab. App.* 138 (1790).
Conurus pubescens, *Steph., Ill. Brit. Ent.* v. 189 (1832).
—— ——, *Erich., Gen. et Spec. Staph.* 221 (1839).
—— ——, *Woll., Ins. Mad.* 565 (1854).

Inhabits Madeira proper; occurring beneath stones and logs,—especially in the fir-woods of intermediate elevations.

520. **Conurus pedicularius.**

Tachyporus pedicularius, *Grav., Col. Micropt.* 133 (1802).
—— ——, *Mann., Brachel.* 60 (1831).
Conurus pedicularius, *Erich., Gen. et Spec. Staph.* 230 (1839).
—— ——, *Woll., Ins. Mad.* 565 (1854).

Inhabits Madeira and Porto Santo; occurring principally, beneath stones, on the open grassy slopes of intermediate and lofty altitudes.

521. Conurus monticola.

Conurus monticola, *Woll., Ins. Mad.* 566 (1854).

Inhabits Madeira proper, occurring in the damp sylvan districts of a lofty elevation. Rare.

Genus 215. TACHYPORUS.

Gravenhorst, *Col. Micropt.* 124 (1802).

522. Tachyporus celer.

Tachyporus celer, *Woll., Ins. Mad.* 567 (1854).

Inhabits the moist sylvan districts of Madeira proper. Rather rare.

523. Tachyporus brunneus.

Oxyporus brunneus, *Fab., Ent. Syst.* i. ii. 535 (1792).
Tachyporus nitidulus, *Grav., Col. Micropt.* 126 (1802).
—— brunneus, *Erich., Gen. et Spec. Staph.* 241 (1839).
—— ——, *Woll., Ins. Mad.* 568 (1854).

Inhabits every island of the Madeiran group, except the Northern Dezerta (on which at least it has not yet been detected); abounding at most elevations.

Genus 216. HABROCERUS.

Erichson, *Käf. der Mark Brand.* i. 400 (1839).

524. Habrocerus capillaricornis.

Tachyporus capillaricornis, *Grav., Mon.* 10 (1806).
—— nodicornis (*Kby*), *Steph., Ill. Brit. Ent.* v. 186 (1832).
Habrocerus capillaricornis, *Erich., Käf. der Mark Brand.* i. 401 (1839).
—— ——, *Woll., Ins. Mad.* 569 (1854).

Inhabits Madeira proper; abounding in damp spots throughout the sylvan districts.

Genus 217. TACHINUS.

Gravenhorst, *Col. Micropt.* 135 (1802).

525. Tachinus Silphoides*.

Staphylinus Silphoides, *Linn., Syst. Nat.* i. ii. 684 (1767).
Tachinus Silphoides, *Steph., Ill. Brit. Ent.* v. 194 (1832).
—— ——, *Erich., Gen. et Spec. Staph.* 245 (1839).
—— ——, *Woll., Ins. Mad.* 570 (1854).

Inhabits Madeira proper; occurring in the dung of cattle, principally at low elevations.

Genus 218. **TRICHOPHYA.**

Mannerheim, *Brachel.* 73 (1831).

526. **Trichophya Huttoni.**

Trichophya Huttoni, *Woll., Ins. Mad.* 572. tab. xiii. f. 6 (1854).

Inhabits Madeira proper; occurring in the damp sylvan districts in the north of the island. Rare.

Genus 219. **MYCETOPORUS.**

Mannerheim, *Brachel.* 62 (1831).

527. **Mycetoporus pronus.**

Mycetoporus pronus, *Erich., Käf. der Mark Brand.* i. 414 (1839).
—— ——, *id., Gen. et Spec. Staph.* 285 (1839).
—— ——, *Woll., Ins. Mad.* 573 (1854).

Inhabits Madeira proper; occurring beneath bark and fallen leaves, in the sylvan regions of intermediate and lofty elevations; and assuming two distinct states,—a larger and a smaller one.

(Subfam. 3. STAPHYLINIDES.)

Genus 220. **OTHIUS.**

(Leach) Steph., *Ill. Brit. Ent.* v. 253 (1832).

528. **Othius strigulosus.**

Othius strigulosus, *Woll., Ins. Mad.* 575 (1854).

Inhabits Madeira proper; occurring beneath fallen leaves, logs of wood, &c., throughout the sylvan districts.

529. **Othius vestitus,** n. sp.

O. niger nitidus, capite prothoraceque politissimis (illo sat magno), elytris abdomineque valde pubescentibus, illis fuscescentibus, antennis pedibusque pallido-ferrugineis.
Long. corp. lin. $4\frac{1}{4}$–vix 5.

O. similar to the *O. Jansoni,* but a little larger and broader; with its head (proportionably) a trifle more robust and ovate; and its elytra and abdomen more pubescent,—the former being somewhat more ample, and of a browner hue; whilst the latter is rather more expanded behind the middle, and therefore a little less acuminated posteriorly.

It is just possible that the present *Othius* may be but a greatly

developed state of the *O. Jansoni*, peculiar to the loftier portions of the sylvan regions; nevertheless since it is exceedingly distinct from the *normal* phasis of that insect, I imagine that it would be scarcely safe to identify it therewith; and I would regard it therefore as a nearly allied species of the same (geographical) type. Three specimens were captured by myself in the north of Madeira proper, during the summer of 1855,—namely, one at the Lombo dos Pecegueiros, and two from amongst damp moss growing on the trunks of the trees at the Cruzinhas (more than 4000 feet above the sea): and another has been recently communicated by Mr. Mason.

530. **Othius Jansoni.**

Othius Jansoni, *Woll., Ins. Mad.* 576 (1854).

Inhabits Madeira proper; occurring in the moist ravines of intermediate altitudes, and having apparently a rather lower range than the *O. vestitus*. As already implied, it is rather smaller and narrower than that insect; its head is a trifle less robust; and its elytra, which are occasionally (*var.* β) quite pale, are a little more piceous (or less strictly fuscescent), not quite so much developed, and, together with the abdomen (which is rather less expanded behind the middle, and more acuminated at its apex), less densely pubescent.

531. **Othius brevicornis,** n. sp.

O. piceo-niger angustulus nitidus, capite prothoraceque politissimis (illo parvusculo), elytris parvis picescentibus, antennis pedibusque pallido-ferrugineis, illis brevibus.
Long. corp. lin. $4\frac{1}{3}$.

O. similar to the *O. Jansoni*, but a trifle narrower, with its head a little less developed and just perceptibly more ovate, its elytra even still more abbreviated, its legs a shade paler, and its antennæ distinctly shorter.

Were it not for the slight structural differences, in the elytra and antennæ, of this insect (which are distinctly shorter), I should have regarded it as the Dezertan state of the *O. Jansoni*,—which, in general aspect, it very much resembles; but since such a concession would perhaps be scarcely consistent with other conclusions, elsewhere arrived at, I have been compelled to regard it as another exponent of the Madeiran (*Othius*) type. A single example (now in the British Museum) was captured by myself, beneath a stone, at the roots of the coarse grass, on the extreme summit of one of the loftiest peaks of the Dezerta Grande (towards the south of the island), early in June 1855.

Genus 221. **XANTHOLINUS.**

Dahl, *Encyclop. Method.* x. 475 (1825).

532. **Xantholinus punctulatus.**

Staphylinus punctulatus, *Payk., Mon. Staph. Suec.* 30 (1789).
—— ——, *Gyll., Ins. Suec.* ii. 353 (1801).
Xantholinus punctulatus, *Erich., Gen. et Spec. Staph.* 328 (1839).
—— ——, *Woll., Ins. Mad.* 577 (1854).

Inhabits Madeira proper; occurring in the dung of cattle, and under fallen leaves, at intermediate altitudes.

533. **Xantholinus linearis.**

Staphylinus linearis, *Oliv., Ent.* iii. 42. 19 (1795).
—— ——, *Mshm, Ent. Brit.* i. 516 (1802).
Xantholinus linearis, *Erich., Gen. et Spec. Staph.* 332 (1839).
—— ——, *Woll., Ins. Mad.* 577 (1854).

Inhabits Madeira proper; occurring, principally beneath stones, in grassy spots of an intermediate elevation.

Genus 222. **STAPHYLINUS.**

Linnæus, *Syst. Nat.* 421 (1758).

534. **Staphylinus maxillosus*.**

Staphylinus maxillosus, *Linn., Syst. Nat.* 421 (1758).
—— ——, *Fab., Ent. Syst.* i. ii. 521 (1792).
—— ——, *Erich., Gen. et Spec. Staph.* 348 (1839).
—— ——, *Woll., Ins. Mad.* 579 (1854).

Inhabits Madeira and Porto Santo; occurring principally in low spots about the towns. It is found also in the Canary Islands.

Genus 223. **PHILONTHUS.**

(Leach) Steph., *Ill. Brit. Ent.* v. 226 (1832).

§ I. *Prothorax seriebus dorsalibus e punctis quatuor compositis.*

535. **Philonthus æneus*.**

Staphylinus æneus, *Rossi, Fna Etrusc.* i. 249 (1790).
—— ——, *Grav., Col. Micropt.* 17 (1802).
Philonthus æneus, *Erich., Gen. et Spec. Staph.* 437 (1839).
—— ——, *Woll., Ins. Mad.* 580 (1854).

Inhabits Madeira proper, occurring sparingly at nearly all altitudes.

536. **Philonthus umbratilis.**

Staphylinus umbratilis, *Grav.*, *Col. Micropt.* 170 (1802).
—— ——, *Mann. Brachel.* 29 (1831).
Philonthus umbratilis, *Erich.*, *Gen. et Spec. Staph.* 445 (1839).
—— ——, *Woll.*, *Ins. Mad.* 581 (1854).

Inhabits Madeira proper, occurring in damp spots of intermediate elevations. Rare.

537. **Philonthus sordidus.**

Staphylinus sordidus, *Grav.*, *Col. Micropt.* 176 (1802).
—— ——, *Mann.*, *Brachel.* 29 (1831).
Philonthus sordidus, *Erich.*, *Gen. et Spec. Staph.* 456 (1839).
—— ——, *Woll.*, *Ins. Mad.* 582 (1854).

Inhabits Madeira and the Dezerta Grande, being rare on the latter island.

§ II. *Prothorax seriebus dorsalibus e punctis quinque compositis.*

538. **Philonthus bipustulatus*.**

Staphylinus bipustulatus, *Panz.*, *Fna Ins. Germ.* 27. 10 (1795).
—— ——, *Grav.*, *Mon.* 63 (1806).
Philonthus bipustulatus, *Erich.*, *Gen. et Spec. Staph.* 468 (1839).
—— ——, *Woll.*, *Ins. Mad.* 583 (1854).

Inhabits Madeira and Porto Santo, occurring in the dung of cattle at most elevations.

539. **Philonthus scybalarius*.**

Philonthus scybalarius, *Nordm.*, *Symbol.* 94 (1838).
—— fuscicornis, *id.*, *Symbol.* 96 (1838).
—— varians, var. *b.*, *Erich.*, *Gen. et Spec. Staph.* 470 (1839).
—— ——, *Woll.*, *Ins. Mad.* 583 (1854).
—— scybalarius, *Kraatz*, *Nat. der Ins. Deutsch.* ii. 601 (1857).

Inhabits Madeira and Porto Santo, occurring in similar places as the last species. According to Dr. Kraatz, the *P. scybalarius* of Nordmann is specifically distinct from the *varians* of Paykul, of which Erichson had regarded it as a variety; and I may add, that a Madeiran specimen which I forwarded to Berlin for comparison was identified by Dr. Kraatz himself with the *scybalarius* of his volume of the *Insecten Deutschlands*, just published.

540. **Philonthus proximus***, n. sp.

P. niger, capite ovato, elytris subconvexis, antennarum basi pedibusque saturate testaceis.
Long. corp. lin. $2\frac{2}{3}$–3.

P. black. *Head* and *prothorax* highly polished, and nearly glabrous;

the *former* ovate; the *latter* slightly piceseent, with a longitudinal series of five punctures down either side of its disk, and with a few scattered ones between them and the edges. *Elytra* a little convex, pubescent, and rather distinctly punctulated. *Antennæ* brownish-piceous; their *base*, and the *legs*, diluted-testaceous,—the tibiæ and tarsi being more infuscated than the femora.

Detected by myself, during the summer of 1855, in the dung of cattle (at low elevations), both in Madeira and Porto Santo. In the former island it was tolerably common near Funchal,—at the Gorgulho, and the Praya Formoza; but in the latter I only obtained a single specimen. I have lately transmitted it to Berlin, for the inspection of Dr. Kraatz (who has just completed his Monograph, in the *Insecten Deutschlands*, of the German *Philonthi*); and it is regarded by him as new.

541. **Philonthus discoideus***.

P. niger, capite rotundato-subquadrato, elytris quadratis limbo testaceo, antennis pedibusque infuscato-testaceis.
Long. corp. lin. $2\frac{1}{2}$.

Staphylinus discoideus, *Grav.*, *Col. Micropt.* 38 (1802).
—— ——, *Gyll.*, *Ins. Suec.* ii. 331 (1810).
—— ——, *Mann.*, *Brachel.* 29 (1831).
Philonthus discoideus, *Erich.*, *Gen. et Spec. Staph.* 474 (1839).

P. black. *Head* and *prothorax* highly polished, and nearly glabrous; the *former* rather large, and rotundate-quadrate,—being a good deal truncated behind; the *latter* with a longitudinal series of five punctures down either side of its disk, and with a few scattered ones between them and the edges. *Elytra* quadrate, very pubescent, rather distinctly punctulated, and with their entire margins (except the basal one) bright-testaceous. *Antennæ* rather short, robust, and pale brownish-ferruginous. *Legs* infuscated-testaceous.

Of the common European *P. discoideus* I captured a single example, during the autumn of 1855, in a garden at Funchal. It is stated by Erichson to be a species of very wide geographical range.

§ III. *Prothorax seriebus dorsalibus e punctis sex compositis.*

542. **Philonthus simulans**, n. sp.

P. angustus æneo-niger, capite magno subquadrato-ovato, elytris æneo-piceis profunde punctatis, antennarum basi pedibusque infuscato-testaceis.
Long. corp. lin. $2–2\frac{3}{4}$.

P. narrow, and brassy-black. *Head* and *prothorax* highly polished,

nearly glabrous, and, when viewed beneath the microscope, appearing closely and coarsely transversely-strigulose,—the lines being much waved; the *former* large, and subquadrate-ovate; the *latter* with a longitudinal series of six punctures down either side of its disk, and with a few scattered ones between them and the edges. *Elytra* considerably diluted in colouring, being brassy-piceous (sometimes almost brassy-testaceous), pubescent, and deeply and rugosely punctured. *Antennæ at base*, and the *legs*, testaceous; but unequally infuscated in parts.

Four specimens of the present *Philonthus* (which is stated by Kraatz to be allied to the European *P. exiguus*) were mixed up with my series of the *P. aterrimus* formerly taken in these islands; and it was not until the summer of 1855 that I perceived my mistake in confounding a second species under (what I had regarded as) the latter. As it will be inferred therefore, the *P. simulans* very much resembles, at first sight, the *aterrimus*; nevertheless it is abundantly distinct therefrom, in reality,—not merely in its external features, but likewise in its habits. As regards the former, its slightly larger size (on the average) and more developed head, in conjunction with its *brassy* surface, its more diluted and deeply punctured elytra, and the transversely-strigulose sculpture of its head and prothorax, which is exceedingly apparent when viewed beneath the microscope (and which is scarcely at all traceable in the *aterrimus*), will readily characterize it; whilst, as regards the latter, it is an insect of a somewhat higher range than its ally, attaining its maximum within the dense forest-districts of intermediate and rather lofty elevations. Moreover, whilst the *P. aterrimus* is more particularly abundant at the edges of the water-courses and streams, the *simulans* occurs especially beneath decaying leaves; and has also the curious habit of counterfeiting death, when captured, by bending its head against its prosternum, and partially curving its abdomen downwards, after the fashion of a *Xantholinus*,—a peculiarity which I have never observed in the *P. aterrimus*, nor indeed (so far as I can recollect) in any member of the present genus.

543. **Philonthus nigritulus.**

Staphylinus nigritulus et aterrimus, *Grav.*, *Col. Micropt.* 41 (1802).
Philonthus aterrimus, *Erich.*, *Gen. et Spec. Staph.* 492 (1839).
—— ——, *Woll.*, *Ins. Mad.* 584 (1854).
—— nigritulus, *Kraatz*, *Nat. der Ins. Deutsch.* ii. 616 (1857).

Inhabits Madeira and Porto Santo; abounding at the edges of the streams, and in other damp spots, at low and intermediate elevations. Dr. Kraatz having recently assigned a sufficient reason for accepting the name of *nigritulus* for this insect, instead of *aterrimus* (the date

of both being the same), the species will probably be recognized in future under that title; and I have adopted it accordingly.

§ IV. *Prothorax seriebus dorsalibus e punctis septem vel octo compositis.*

544. **Philonthus punctipennis**, n. sp.

P. piceo-niger, capite subquadrato-ovato, elytris pubescentibus creberrime et fortiter punctatis, suturâ vix dilutiore, antennarum basi pedibusque rufo-ferrugineis.
Mas, tarsis anticis fortiter dilatatis.
Long. corp. lin. 4–4½.

P. piceous-black. *Head* and *prothorax* highly polished, and nearly glabrous; the *former* subquadrate-ovate, and with some very deep punctures on either side behind the eyes; the *latter* with a longitudinal series of seven or eight punctures down either side of its disk, and with a few scattered ones between them and the edges. *Elytra* densely pubescent, very closely and rather coarsely punctured, and with the suture sometimes a little diluted in colouring. *Antennæ* fusco-ferruginous; their *base*, the *palpi*, and the *legs*, more or less brightly rufo-ferruginous.
Male, with the two front tarsi considerably dilated.

Five specimens of the large and distinct *Philonthus* described above were discovered by Mr. Bewicke, in the river-bed at S^ta^ Cruz (in the east of Madeira proper), during March 1856. The example in the British Museum was presented by its captor.

§ V. *Prothorax (et caput) sat crebre punctatus, lineâ mediâ longitudinali lævi: palporum articulus ultimus magis acuminatus.*

545. **Philonthus filiformis.**

Philonthus filiformis, *Woll., Ins. Mad.* 585 (1854).

Inhabits Madeira proper, occurring in damp spots of intermediate altitudes. Rare. It is closely related to the *P. procerulus* of more northern latitudes, of which perhaps it may be but a geographical state. At any rate, Dr. Kraatz, to whom I sent it for inspection, returned it with the remark, "a *procerulo* antennis validioribus differre videtur."

(Subfam. 4. PÆDERIDES.)

Genus 224. **ACHENIUM.**

(Leach) Curtis, *Brit. Ent.* iii. 115 (1826).

546. Achenium Hartungii.

Achenium Hartungii (*Heer*), *Woll. Ins. Mad.* 587 (1854).

Inhabits Madeira and Porto Santo; occurring during the winter and spring, at rather low elevations. Rare. It is probably but a geographical state of the European *A. depressum*.

Genus 225. LATHROBIUM.

Gravenhorst, *Col. Micropt.* 179 (1802).

547. Lathrobium multipunctatum.

Lathrobium multipunctatum, *Grav., Col. Micropt.* 52 (1802).
—— ——, *Erich., Gen. et Spec. Staph.* 591 (1839).
—— ——, *Heer, Fna Col. Helv.* i. 238 (1841).
—— ——, *Woll., Ins. Mad.* 588 (1854).

Inhabits Madeira proper, occurring in damp spots at nearly all altitudes.

Genus 226. LITHOCHARIS.

(Dejean) Boisd. et Lacord., *Faun. Ent. des Env. de Paris*, i. 431 (1835).

548. Lithocharis fuscula.

Lithocharis fuscula (*Ziegl.*), *Boisd. et Lac., Faun. Ent. des Env. de Paris*, i. 431 (1835).
—— —— (——), *Erich., Gen. et Spec. Staph.* 611 (1839).
—— —— (——), *Heer, Fna Col. Helv.* i. 235 (1841).
—— —— (——), *Woll., Ins. Mad.* 589 (1854).

Inhabits Madeira proper; occurring in damp spots, principally in the north of the island.

549. Lithocharis ochracea*.

Pæderus ochraceus, *Grav., Col. Micropt.* 59 (1802).
Lithocharis ochracea, *Erich., Gen. et Spec. Staph.* 623 (1829).
—— ——, *Heer, Fna Col. Helv.* i. 236 (1841).
—— ——, *Woll., Ins. Mad.* 590 (1854).

Inhabits Madeira proper; occurring in damp spots, and beneath the dung of cattle, at low elevations,—principally in the south of the island.

550. Lithocharis indigena, n. sp.

L. testacco-rufa subnitida, capite magno subquadrato profunde sed remote punctato, oculis parvis demissis, prothorace densius sed minus profunde punctato, subquadrato antice lato, elytris valde abbreviatis, abdomine basin versus nigricante, pedibus robustis testaceis.
Long. corp. lin. $1\frac{3}{4}$.

L. testacco-rufous, slightly shining, and clothed (at any rate on the elytra) with a decumbent griseous pubescence. *Head* and *prothorax* faintly alutaceous, when viewed beneath the microscope: the *former* large and subquadrate; very remotely, but deeply punctured; with a minute and obscure black spot on either side of the forehead; and with the eyes small, and scarcely at all prominent: the *latter* subquadrate, and broad anteriorly; more finely, and more closely, punctured than the head; the punctures shallow and ill-defined. *Elytra* much abbreviated. *Abdomen* blackish towards its base, but paler posteriorly. *Antennæ* brownish-ferruginous, with their apical and two basal joints rufo-testaceous. *Legs* robust, and testaceous.

A most distinct and interesting *Lithocharis*, and truly indigenous to these islands,—the single specimen which has hitherto come under my observation having been captured by myself, from beneath a stone, in the upland forest-region of the Cruzinhas (nearly 5000 feet above the sea) during July 1855. Its greatly abbreviated elytra, anteriorly widened prothorax, and almost rufous hue, will, apart from its peculiarities of sculpture, &c., at once distinguish it from its allies.

551. **Lithocharis melanocephala.**

Pæderus melanocephalus, *Fab.*, *Ent. Syst.* i. ii. 538 (1792).
Lithocharis melanocephala, *Erich.*, *Gen. et Spec. Staph.* 614 (1839).
—— ——, *Heer*, *Fna Col. Helv.* i. 235 (1841).
—— ——, *Woll.*, *Ins. Mad.* 591 (1854).

Inhabits all the islands of the Madeira group, except the Northern Dezerta (on which, at least, it has not yet been detected); occurring beneath stones, in grassy spots, at intermediate elevations.

552. **Lithocharis debilicornis,** n. sp.

L. rufo-testacea subnitida, capite magno quadrato pubescente, profunde sed remote punctato, oculis parvis prominentibus, prothorace densius sed minus profunde subpunctato, subrotundato-quadrato, abdomine paulo obscuriore, elytris, antennis (brevissimis) pedibusque testaceis.
Long. corp. lin. $1\frac{1}{3}$.

L. rufo-testaceous, slightly shining, and less pubescent (except on the head, which is *more* so) than any of the other species. *Head* and *prothorax* subalutaceous: the *former* quadrate, being suddenly and greatly truncated behind; remotely, but rather deeply punctured; with a very minute, and hardly distinguishable, black spot on either side of the forehead; and with the eyes small, and very prominent: the *latter* roundish-quadrate; more finely, and more closely, punctured than the head; the punctures shallow, and exceedingly ill-defined. *Elytra* paler than the head and prothorax,

being apparently almost testaceous. *Abdomen* a little obscurer than the rest of the surface. *Antennæ* and *legs* testaceous: the *former* extremely abbreviated, and differently constructed from those of the ordinary *Lithochari*,—the joints between the second and the last being much shorter and more transverse, and the ultimate one itself rounder and less acuminated at its apex.

The single example from which I have drawn out the above diagnosis (and which has been presented to the British Museum by its captor) was detected by Mr. Bewicke in Madeira proper (I believe near Funchal); and, like the last, is the only one of its kind which has hitherto come beneath my notice. Its remarkably short, and curiously constructed antennæ, in conjunction with its comparatively prominent eyes, would seem at first sight to remove it from the members of the present genus; nevertheless, in other respects, it is essentially a *Lithocharis*.

Genus 227. **RUGILUS.**

(Leach) Curtis, *Brit. Ent.* iv. 168 (1827).

553. **Rugilus affinis.**

Stilicus affinis, *Erich., Käf. der Mark Brand.* i. 522 (1837).
Rugilus affinis, *Heer, Fna Col. Helv.* i. 232 (1841).
Stilicus affinis, *Redt., Fna Austr.* 720 (1849).
Rugilus affinis, *Woll., Ins. Mad.* 592 (1854).

Inhabits Madeira proper, occurring beneath stones and fallen leaves at intermediate elevations.

Genus 228. **SUNIUS.**

(Leach) Steph., *Ill. Brit. Ent.* v. 274 (1832).

554. **Sunius angustatus.**

Staphylinus angustatus, *Payk., Mon. Staph. Suec.* 36 (1789).
Sunius angustatus, *Erich., Gen. et Spec. Staph.* 640 (1839).
—— ——, *Heer, Fna Col. Helv.* i. 229 (1841).
—— ——, *Woll., Ins. Mad.* 593 (1854).

Inhabits Madeira, Porto Santo, and the Southern Dezerta; occurring beneath stones, in grassy spots, at intermediate altitudes.

555. **Sunius bimaculatus.**

Sunius bimaculatus, *Erich., Gen. et Spec. Staph.* 641 (1839).
—— ——, *Woll., Ins. Mad.* 594 (1854).

Inhabits Madeira proper, and has been observed hitherto only at

the Praya Formoza near Funchal,—where a specimen was captured by Professor Heer in February 1851, and from whence a second has been lately communicated by Mr. Bewicke.

Genus 229. **MECOGNATHUS.**

Wollaston, *Ins. Mad.* 595. tab. xiii. f. 8 (1854).

556. **Mecognathus Chimæra.**

Mecognathus Chimæra, *Woll., Ins. Mad.* 595. tab. xiii. f. 8 (1854).

Inhabits Madeira proper; occurring, beneath stones and logs of wood, throughout the forest-districts of intermediate and lofty elevations.

(Subfam. 5. STENIDES.)

Genus 230. **STENUS.**

Latreille, *Précis des Caract. Gen. des Ins.* 77 (1796).

§ I. *Abdomen marginatum: tarsi articulo quarto simplice.*

557. **Stenus guttula.**

Stenus guttula, *Müll., in Germ. Mag.* iv. 225 (1821).
—— ——, *Erich., Gen. et Spec. Staph.* 691 (1839).
—— ——, *Heer, Fna Col. Helv.* i. 214 (1841).
—— ——, *Woll., Ins. Mad.* 597 (1854).

Inhabits Madeira and Porto Santo; occurring amongst shingle at the edges of the streams at most elevations, and being rarer in the latter island (where I first detected it during the spring of 1855) than in the former.

558. **Stenus providus.**

Stenus providus, *Erich., Käf. der Mark Brand.* i. 546 (1837).
—— ——, *id., Gen. et Spec. Staph.* 707 (1839).
—— ——, *Heer, Fna Col. Helv.* i. 217 (1841).
—— ——, *Woll., Ins. Mad.* 598 (1854).

Inhabits Madeira proper; occurring in similar spots as the last species, but much less abundantly. The Madeiran specimens of this insect are a trifle larger and more robust than is commonly the case in more northern latitudes; their legs also are a shade darker, and their palpi usually entirely pale,—even at the apex: nevertheless in all their essential characters they entirely agree with the ordinary European type.

559. **Stenus undulatus.**

Stenus undulatus, *Woll., Ins. Mad.* 599 (1854).

Inhabits Madeira proper; occurring (principally amongst the *Marchantia polymorpha*) in damp spots, at the edges of the waterfalls and trickling streams, at intermediate and lofty altitudes,—and descending in the north of the island to a comparatively low elevation. Rare.

§ II. *Abdomen immarginatum: tarsi articulo quarto bilobo.*

560. **Stenus hydropathicus,** n. sp.

S. niger, crebre et valde profunde punctatus, parce subargenteo-pubescens, prothorace obovato, elytris breviusculis subventricosis, antennis, palpis pedibusque testaceis, femoribus ad apicem tibiisque versus basin nigrescentibus.

Mas, abdominis segmento sexto subtus in medio triangulariter exciso.

Fœm. adhuc latet [forsan abdominis segmento sexto eodem acute rotundato (ut in *S. cicindeloides*)].

Long. corp. lin. vix $2\frac{1}{2}$.

S. black, very slightly shining, and rather sparingly besprinkled with a short and somewhat silvery pile. *Head* and *prothorax* rather closely, and exceedingly coarsely punctured; the *former* somewhat flattened, with a very abbreviated longitudinal ridge immediately behind the insertion of either antenna, and with the palpi pale testaceous; the *latter* obovate, and unchanneled. *Elytra* rather short and subventricose (being a little rounded at the sides, and rather more convex than in the other species here enumerated), and with the sutural line rather broad and conspicuous. *Abdomen* conical and unmargined, and a good deal narrower than the elytra even at its base. *Antennæ, palpi,* and the *legs,* bright rufo-testaceous; the *femora* at their apex, and the basal region of the *tibiæ,* being more or less black.

Male, with the *sixth* segment of the *abdomen beneath* triangularly cut-out (or emarginated) in the centre.

Female, probably (as in the European *S. cicindeloides*) with the same segment somewhat acutely *produced* at the same point (instead of emarginated); nevertheless having as yet detected only two males, I am unable to say this for certain.

Two specimens of the present addition to our Fauna were captured by myself, during the summer of 1855, in the north of Madeira proper,—one on the dripping rocks alongside the first large waterfall on the coast-road between São Vincente and Seisal; and the other in a somewhat similar situation, at the edges of a trickling stream which finds its way over the lofty perpendicular cliffs between

Ribeira da Janella and Porto Moniz. It is evidently a truly indigenous insect, and would appear to reside in the dampest spots, exposed to the constant spray of the waterfalls,—a circumstance which has suggested its specific name. It is closely related to the European *S. cicindeloides*, of which it may be regarded as the Madeiran representative. Nearly as it approaches that species, however, in general aspect, it cannot be looked upon, I think, as a geographical modification of it,—presenting too many characters (however small) which could scarcely, *in conjunction*, be the result of local influences of any kind. Thus, it is rather smaller and narrower than its European ally, *its elytra are* (in proportion) *distinctly shorter* and a little more ventricose, its abdomen is rather more acuminated, and its antennæ are entirely pale.

561. **Stenus fulvescens**, n. sp.

Stenus Heeri, var. *β*, *Woll., Ins. Mad.* 600 (1854).

Inhabits the mountains of Madeira proper, occurring beneath stones in the damp sylvan districts of a high elevation: rare. In the *Insecta Maderensia* I regarded this species as a large state, or variety, of the *S. Heeri*; but a further acquaintance with it has convinced me that it is truly distinct therefrom. Thus, it is not only (on the average) "rather larger, and with the antennæ, palpi and legs proportionably a little longer, and of an altogether paler hue," but it is also more densely clothed with fulvescent pubescence, its punctuation is a little rougher, and the surface of its elytra is somewhat more uneven.

562. **Stenus Heeri.**

Stenus Heeri, *Woll., Ins. Mad.* 600 (1854).

Inhabits Madeira proper; occurring in similar spots as the last species, and often in company with it. Rare.

(Subfam. 6. OXYTELIDES.)

Genus 231. **PLATYSTHETUS.**

Mannerheim, *Brachel.* 46 (1831).

563. **Platysthetus spinosus.**

Platysthetus spinosus, *Erich., Gen. et Spec. Staph.* 784 (1839).
—— ——, *Woll., Ins. Mad.* 602 (1854).

Inhabits Porto Santo, and is hitherto (in these islands) unique,—

the single specimen having been taken by myself in a sandy lane immediately outside the Cidáde, during December 1848.

564. Platysthetus fossor.

Platysthetus fossor, *Woll., Ins. Mad.* 603 (1854).

Inhabits Madeira proper; occurring amongst mud at the edges of small streams, especially in the north of the island. Local.

Genus 232. OXYTELUS.

Gravenhorst, *Col. Micropt.* 101 (1802).

565. Oxytelus piceus*.

Staphylinus piceus, *Linn., Syst. Nat.* i. ii. 686 (1767).
Oxytelus piceus, *Erich., Gen. et Spec. Staph.* 788 (1839).
—— ——, *Heer, Fna Col. Helv.* i. 204 (1841).
—— ——, *Woll., Ins. Mad.* 606 (1854).

Inhabits Madeira and Porto Santo; occurring in the dung of cattle, principally at low elevations.

566. Oxytelus sculptus.

Oxytelus sculptus, *Grav., Mon.* 191 (1806).
—— longicornis, *Mann., Brachel.* 48 (1831).
—— sculptus, *Erich., Gen. et Spec. Staph.* 788 (1839).
—— ——, *Woll., Ins. Mad.* 607 (1854).

Inhabits Madeira proper; occurring in the dung of cattle, beneath vegetable refuse, and in damp spots, at low and intermediate altitudes.

567. Oxytelus insignitus*.

O. niger subnitidus, capite vix punctulato basi utrinque longitudinaliter strigoso, prothorace elytrisque sat profunde substrigulosopunctatis, illo (cum ore) rufo-piceo postice rotundato, his dilutotestaceis, antennarum basi pedibusque pallido-testaceis.
Mas, capite maximo, clypeo apice in medio triangulariter acuminato, mandibulis valde elongatis.
Fem., capite minore distinctius punctulato, clypeo antice rotundato, mandibulis minoribus.
Long. corp. lin. $1\frac{1}{3}$–vix $1\frac{2}{3}$.

Oxytelus insignitus, *Grav., Mon.* 188. 5. *d* (1806).
—— Americanus, *Mann., Brachel.* 48 (1831).
—— insignitus, *Erich., Gen. et Spec. Staph.* 793 (1839).
—— mandibulatus, *Heineken (olim), in litt.*

O. black, and slightly shining. *Head* minutely alutaceous; almost impunctate in the males, but with the punctures more evident in

the females; longitudinally strigulose (especially in the male sex) on either side behind; and with its anterior angles (beneath which the antennæ are inserted) much raised, and rufo-piceous. *Prothorax* and *elytra* rather deeply punctured, and substrigulose in parts: the *former* rufo-piceous, rounded posteriorly, deeply trisulcated down the disk (the outer grooves being but very slightly arcuate, and the central one narrowed behind), and widely impressed towards either side. *Elytra* diluted-testaceous. *Mouth* rufo-piceous. *Abdomen* almost simple in both sexes. *Antennæ* with their four basal joints testaceous. *Legs* pale testaceous.

Male, with the head immensely enlarged; its clypeus sinuated in front, and triangularly acuminated in the centre; and with the mandibles enormously elongated, and acute.

Female, with the head smaller (and consequently much less developed behind the eyes); its clypeus simply rounded anteriorly; and with the mandibles as small as in the ordinary *Oxyteli*.

Of the present addition to our Catalogue I have had an old specimen long in my possession, given to me by the Rev. R. T. Lowe, and taken by the late Dr. Heineken (whose ticket, bearing the manuscript name of *mandibulatus*, is still attached to it); and it was through an oversight that it was not included in the *Insecta Maderensia*, in 1854. It was not however until my visit to the island in 1855 that I myself succeeded in observing the species *in situ*,—which appears to be tolerably common in and around Funchal, where it occurs principally in the dung of cattle, and may be often captured on the wing. Like many other insects, it may possibly be an importation into the Madeiras since the period of their colonization; for, singularly enough, it is recorded, both by Erichson and Mannerheim, as a native of America,—having been taken in Columbia and Brazil: it has been brought however, likewise, from the island of St. Thomas, off the western coast of tropical Africa.

It may be at once known from the other *Oxyteli* here enumerated by its diluted-testaceous elytra, piceous and posteriorly rounded prothorax, and by the largely developed head and mandibles (and centrally acuminated clypeus) of its males.

568. **Oxytelus complanatus.**

Oxytelus depressus, *Gyll.* [nec *Grav.* 1802], *Ins. Suec.* ii. 457 (1810).
—— complanatus, *Erich., Käf. der Mark Brand.* i. 595 (1837).
—— ——, *Heer, Fna Col. Helv.* i. 206 (1841).
—— ——, *Woll., Ins. Mad.* 608 (1854).

Inhabits Madeira and Porto Santo; abounding in the former island at nearly all altitudes, but being rarer in the latter. In the vicinity of the Funchal beach it generally teems.

569. Oxytelus nitidulus.

Staphylinus piceus, *Schrank* [nec *Linn.* 1767], *Enum. Ins. Austr.* 236 (1781).
Oxytelus nitidulus, *Grav.*, *Col. Micropt.* 107 (1802).
—— ——, *Erich.*, *Gen. et Spec. Staph.* 795 (1839).
—— ——, *Woll.*, *Ins. Mad.* 609 (1854).

Inhabits Madeira and Porto Santo, occurring sparingly at most elevations.

570. Oxytelus glareosus.

Oxytelus glareosus, *Woll.*, *Ins. Mad.* 610 (1854).

Inhabits Madeira proper; occurring, amongst vegetable refuse, in the gardens of Funchal. At times abundant.

Genus 233. TROGOPHLŒUS.

Mannerheim, *Brachel.* 49 (1831).

571. Trogophlœus bilineatus*.

T. niger subnitidus, capite prothoraceque creberrime subrugulosopunctatis, hoc ad latera rugosius punctato, in disco postico quadrifoveolato, antennis fusco-piceis, basi pedibusque rufo-testaceis. Long. corp. lin. $1\frac{1}{2}$.

Trogophlœus corticinus, *Mann.* [nec *Grav.* 1806], *Brachel.* 49 (1831).
Carpalimus bilineatus (*Kby*), *Steph.*, *Ill. Brit. Ent.* v. 324 (1832).
Trogophlœus bilineatus, *Erich.*, *Käf. der Mark Brand.* i. 600 (1839).
—— ——, *id.*, *Gen. et Spec. Staph.* 806 (1839).

T. black, slightly shining, and pubescent. *Head* and *prothorax* very densely, and rather deeply and rugosely, punctured: the *latter* subcordate, more roughly and coarsely punctured at either side, and with two longitudinal interrupted impressions on its hinder disk,—constituting four rather distinct foveæ. *Elytra* more coarsely, and rather less closely, punctured than the head and prothorax. *Antennæ* long, and brownish-piceous; their *base*, and the *legs*, rufo-testaceous.

Four specimens, from which the above description has been compiled, were captured by myself (on the wing) in Funchal, during the summer of 1855. After a very careful comparison, I can see nothing in them sufficient to warrant their separation from the common European *T. bilineatus*; and as such, I may add, they were named by Dr. Kraatz of Berlin. The species may be known, from the other *Trogophlœi* here enumerated, by its comparatively roughly and closely punctured head and prothorax, and by the four rather distinct foveæ on the hinder disk of the latter.

572. **Trogophlœus transversalis**, n. sp.

T. niger subnitidus, capite minus crebre, prothorace crebre punctatis, hoc postice profunde transversim impresso, elytris postice paulo dilutioribus, antennis fusco-piceis basi piceis, pedibus diluto-testaceis.
Long. corp. lin. $1\frac{1}{2}$.

T. black, shining, and pubescent. *Head* and *prothorax* less rugosely, and (especially the former) rather less densely, punctured than in the *T. bilineatus*: the *latter* subcordate, equally punctured nearly all over, with a deep *transverse* impression (rather curved at either end) behind, and with the two front foveæ (on the disk) almost obsolete. *Elytra* ample; rather diluted in colouring posteriorly; and more coarsely, and rather less closely, punctured than the head and prothorax. *Antennæ* long, and brownish-piceous; their base being only slightly diluted in hue. *Legs* diluted-testaceous.

A most distinct *Trogophlœus*, and hitherto unique,—the single example which has as yet come beneath my notice (and which was regarded as new by Dr. Kraatz of Berlin) having been taken by myself, on the wing, in a cavern of the Southern Dezerta, or Bugio, during June 1855. In its comparatively large size and long (though basally darker) antennæ, it agrees with the *T. bilineatus*; but its less rugosely punctured, and rather more shining surface, in conjunction with its posteriorly diluted elytra, and (above all) the deep and well-defined *transverse* impression on its prothorax behind, will at once, apart from other differences, distinguish it from that species.

573. **Trogophlœus nigrita**, n. sp.

T. ater subnitidus, capite minutissime ruguloso sed vix punctato, oculis prominentibus, prothorace leviter subruguloso-punctulato, in disco postico profunde longitudinaliter bi-impresso, antennis brevibus fuscis, pedibus piceis, tarsis flavo-testaceis.
Long. corp. lin. $1\frac{1}{3}$.

T. deep black, slightly shining, and delicately pubescent. *Head* most minutely and densely roughened (or sub-alutaceous), but with scarcely any indication of punctures,—even behind; rather smaller (in proportion) than in either of the preceding species, with the forehead narrower, and the eyes more prominent. *Prothorax* subcordate, lightly subrugulose-punctulate (the punctures being small and ill-defined, though rather rougher and larger towards either side), and with two deep longitudinal impressions on its hinder disk,—which are separated by a rather acute ridge, though hardly sufficiently interrupted *across* to be considered as constituting four foveæ. *Elytra* much more coarsely punctured than the prothorax. *Antennæ* short, and fuscous (being *darker* at

the base than towards the apex). *Legs* dark-piceous; with the *tarsi* pale yellowish-testaceous.

The deep-black hue of the present *Trogophlœus*, the feet alone (although the entire limbs are slightly diluted in colouring) being pale-testaceous, in conjunction with its short antennæ, almost impunctate (though rugulose) head, and the deep longitudinal foveæ on its hinder prothoracic disk, give it a character which it is impossible to mistake. A solitary specimen (now in the British Museum) was captured by myself in the island of Porto Santo (at the edges of the small stream at the Zimbral d'Areia) during the spring of 1855.

574. Trogophlœus corticinus.

Oxytelus corticinus, *Grav.*, *Mon.* 192 (1806).
—— ——, *Oliv.*, *Encycl. Meth.* viii. 416 (1819).
Trogophlœus corticinus, *Erich.*, *Gen. et Spec. Staph.* 809 (1839).
—— nanus, *Woll.*, *Ins. Mad.* 611 (1854).

Inhabits Madeira proper; occurring in damp, muddy spots at intermediate elevations. Rare. The *T. nanus* of the *Insecta Maderensia* appears, upon a further acquaintance with it, to be identical with the European *T. corticinus*,—as indeed has been lately pointed out to me by Dr. Kraatz. It is the smallest and narrowest of the Madeiran species hitherto detected, with the exception of the *T. simplicicollis*; and it may be readily known by its densely, and almost equally, punctulated head and prothorax, by the four shallow subobsolete foveæ on the hinder disk of the latter, and by its antennæ being concolorous,—their base being scarcely at all more diluted in colouring than their apex.

575. Trogophlœus simplicicollis, n. sp.

T. angustus niger subopacus, capite prothoraceque minutissime æqualiter punctulatis, hoc simplici (haud foveolato), elytris præsertim apicem versus plus minus dilutioribus, antennis gracilibus fusco-piceis, basi pedibusque picco-testaceis.
Long. corp. lin. $\frac{2}{3}$–1.

T. minute, narrow, black, sub-opake, and delicately pubescent. *Head* and *prothorax* closely, minutely, and equally punctulated all over: the *latter* subquadrate-cordate, and perfectly even,—being free from any indications of foveæ. *Elytra* more or less diluted in colouring, especially posteriorly; and more coarsely punctured than the head and prothorax. *Antennæ* rather slender, and fusco-piceous; their *base*, and the *legs*, picco-testaceous.

The very minute size and narrow outline of the present insect, in conjunction with the entire freedom of its prothorax from any trace

of depressions or foveæ, will readily distinguish it from its allies here enumerated. This latter character indeed is (for the *Trogophlœi*) a very anomalous one; and I may add, that Mr. Janson, to whom I submitted the species for inspection, and who has paid considerable attention to the *Oxytelides*, observed that it was the only *Trogophlœus* with which he was acquainted that possessed this peculiarity. The *T. fuliginosus*, however, has its prothoracic foveæ *almost* obsolete; and accordingly Mr. Janson makes the following remark, concerning the Porto-Santan *simplicicollis*:—"Its nearest ally appears to me to be the *T. fuliginosus*; but whilst, on the one hand, its totally smooth (non-foveolated) thorax indicates its relationship to that species, its minute size, *narrow* thorax, and the shortness of the third joint of its antennæ (as compared with the second) perhaps render its location near the *pusillus* more natural." It was detected by myself, in tolerable abundance, in Porto Santo, at the beginning of May 1855,—burrowing into the earth which forms the bank of the (brackish) stream at the Zimbral d'Areia. Its excessively minute size, however, and dark colour, rendered it extremely difficult to see, and capture; and it could only be obtained by watching closely, as it ascended to the surface during the hot sunshine, and securing it along with a portion of the soil.

(Subfam. 7. OMALIADES.)

Genus 234. **OMALIUM.**

Gravenhorst, *Col. Micropt.* 116 (1802).

576. **Omalium ocellatum.**

Omalium ocellatum, *Woll., Ins. Mad.* 613 (1854).

Inhabits the Northern Dezerta, or Ilheo Chão, and is hitherto unique,—the single specimen as yet detected having been captured by myself, on that island, early in June 1850.

577. **Omalium clavicorne,** n. sp.

O. lineare alutaceum subopacum, capite nigro ocellis flavo-piceis instructo, prothorace rufo-ferrugineo, in disco postico obsolete longitudinaliter bifoveolato, elytris testaceis, apicem versus necnon interdum in regione scutellari obscurioribus, abdomine inæqualiter fusco-piceo, antennis valde clavatis (clavâ fusco-piceâ), ad basin pedibusque rufo-testaceis.

Long. corp. lin. $1\frac{1}{4}$–$1\frac{1}{2}$.

O. narrow and linear, densely and minutely alutaceous all over, with very distant and shallow punctures (which are almost absent on

the head, and rather deeper and more numerous on the elytra than elsewhere) intermixed, and almost opake. *Head* black, or piceous-black; with the anterior angles (beneath which the antennæ are inserted) a little raised, but rounded-off; with an oblique groove extending backwards from either anterior angle to the hinder part of the forehead,—the groove being shallow (and sometimes evanescent) in the centre, but deep and abruptly terminated behind, where there is a piceous (or yellowish-piceous) ocellus immediately within it. *Prothorax* transverse-quadrate, and a little narrowed posteriorly; rufo-ferruginous; and with a shallow, sub-obsolete longitudinal fovea on either side of its hinder disk. *Elytra* short, and testaceous, with their apical portion gradually (and more or less darkly) clouded, or blackened; and generally with their scutellary region, also, slightly so. *Abdomen* unequally brownish-piceous. *Antennæ* shorter than in the last species, and more distinctly clavated than in either it or the *O. granulatum*; the *club*, which is composed of the last six joints, dark fusco-piceous: the rest of the *antennæ*, together with the *legs*, rufo-testaceous.

The very interesting *Omalium* from which the above description has been compiled would seem to occur peculiarly (so far as I have hitherto observed) beneath the bark of the gigantic *Euphorbia mellifera*,—under which circumstances I took it (or, rather, might have taken it) in considerable abundance, during the summer of 1855, in the upland region of the Fanal. In conjunction indeed with *Aphanarthrum* and *Mesites Euphorbiæ*, it is completely destroying the noble Euphorbias for which that elevated district is so famous; and I may add that the same fact was noticed by Mr. Mason, during his recent encampment on the selfsame spot.

Although very distinct specifically, it belongs to exactly the same structural type as the other two Madeiran *Omalia*; and concerning its general affinities, Mr. Janson (to whom I lately submitted it for inspection) makes the following remark:—"The peculiar form of its antennæ (presenting an elongate, six-jointed club) places this species in intimate connexion with the *O. planum*, from which, however, it differs abundantly,—in colour, in its narrower form, longer elytra, sparsely punctured abdomen, more robust antennæ, small, alutaceous and almost impunctate head; and in its narrow and densely alutaceous thorax (with exceedingly shallow punctures thinly strewn over its surface), which has moreover two shallow post-dorsal impressions, and no appearance of the rounded foveæ which are so evident on the anterior margin in that insect." Its somewhat unusually clavated antennæ (the club of which, however, is better defined than it would otherwise appear, through its being darkly coloured) has suggested its specific name.

578. **Omalium granulatum.**

Omalium granulatum, *Woll., Ins. Mad.* 613 (1854).

Inhabits Madeira proper, occurring in the sylvan districts of intermediate elevations. Rare.

(Subfam. 8. PROTEINIDES.)

Genus 235. **MEGARTHRUS.**

(Kirby) Steph., *Ill. Brit. Ent.* v. 330 (1832).

579. **Megarthrus longicornis.**

Megarthrus longicornis, *Woll., Ins. Mad.* 615. tab. xiii. f. 9 (1854).

Inhabits Madeira proper, occurring in similar spots as the last species. Very rare.

Genus 236. **METOPSIA.**

Wollaston, *Ins. Mad.* 616. tab. xiii. f. 7 (1854).

580. **Metopsia ampliata.**

Metopsia ampliata, *Woll., Ins. Mad.* 616. tab. xiii. f. 7 (1854).

Inhabits Madeira proper; occurring, beneath stones and logs of wood, throughout the sylvan regions of intermediate and lofty altitudes.

TOPOGRAPHICAL CATALOGUE.

Sectio I. GEODEPHAGA.

Fam. 1. **Carabidæ.**	Mad.	Pto Ste.	N. Dez.	Dez. Gr.	S. Dez.
1. *Tarus*, Clairv.					
1. *Maderæ*, W.	*	....	....	....	....
2. suturalis, Dej.	*	*	....	*	....
2. *Dromius*, Bon.					
3. *insularis*, W.	*	....	*	*	....
4. *alutaceus*, W.	*	....	....	....	....
5. sigma, Rossi	*	*	....	*	....
6. *arenicola*, W.	*	*	....	....	....
7. obscuroguttatus (Anders.), Dufts.	*	....	....	....	....
8. glabratus (Meg.), Dufts.	*	....	....	....	....
9. maurus (Meg.), Sturm	*	*	....	*	....
10. plagiatus (Meg.), Dufts.	....	*	....	....	....
3. *Scarites*, F.					
11. *abbreviatus* (Koll.), Dej.	*	*	*	*	*
12. *humeralis*, W.	....	*	....	....	....
4. *Apotomus* (Hoffm.), Illig.					
13. rufus, Rossi	*	*	....	....	....
5. *Calosoma*, Weber					
14. Maderæ, F.	*	*	....	*	*
6. *Leistus*, Fröhlich					
15. *ellipticus*, W.	*	....	....	....	....
7. *Notiophilus*, Dum.					
16. geminatus, Dej.	*	....	....	*	*
8. *Elliptosoma*, W.					
17. *Wollastonii*, Javet	*	....	....	....	....
9. *Eurygnathus*, W.					
18. *Latreillei*, Lap.	....	*	....	*	....
10. *Zargus*, W.					
19. *Schaumii*, W.	*	....	....	....	....
20. *Desertæ*, W.	....	....	....	*	*
21. *pellucidus*, W.	*	....	....	*	....
11. *Pristonychus*, Dej.					
22. alatus, W.	*	*	....	....	....
12. *Calathus*, Bon.					
23. *vividus*, F.	*	....	....	....	....
24. *complanatus* (Koll.), Dej.	*	*	*	*	*
25. fuscus, F.	*	....	....	....	....
13. *Anchomenus*, Bon.					
26. pallipes, F.	*	*	....	....	....
27. marginatus, L.	*	....	....	....	....

	Mad.	P^to Sto.	N. Dez.	Dez. Gr.	S. Dez.
14. *Olisthopus*, Dej.					
28. *Maderensis*, W.	*			*	*
29. *acutangulus*, W.	*				
30. *Ericæ*, W.	*				
31. elongatus, W.	*	*			
15. *Argutor* (Meg.), Steph.					
32. *robustus*, W.	*				
33. *gracilipes*, W.	*				
34. *dilaticollis*, W.	*				
35. *curtus*, W.	*				
16. *Omaseus* (Ziegl.), Steph.					
36. nigerrimus, Dej.	*				
37. *Wollastoni*, Heer	*	*			
17. *Amara*, Bon.					
38. trivialis, Gyll.	*	*			
39. *superans*, W.	*				
18. *Anisodactylus*, Dej.					
40. binotatus, F.	*				
19. *Harpalus*, Lat.					
41. attenuatus, Steph.	*	*		*	
42. litigiosus, Dej.	*	*			
43. distinguendus, Dufts.	*	*			
44. *vividus*, Dej.	*	*	*	*	*
20. *Ophonus* (Ziegl.), Steph.					
45. obscurus, F.	*				
21. *Stenolophus* (Meg.), Steph.					
46. Teutonus, Schr.	*				
47. dorsalis, F.	*				
22. *Bradycellus*, Er.					
48. fulvus, Mshm	*				
49. *excultus*, W.	*				
23. *Trechus*, Clairv.					
50. fimicola, W.	*				
51. *nigrocruciatus*, W.	*				
52. *lævis*, W.	*				
53. *flavomarginatus*, W.	*				
54. *signatus*, W.	*				
55. *dilutus*, W.	*				
56. *umbricola*, W.	*				
57. *quadricollis*, W.	*				
58. *custos*, W.	*				
59. *alticola*, W.	*				
60. *cautus*, W.		*			
24. *Thalassophilus*, W.					
61. *Whitei*, W.	*	*			
25. *Bembidium*, Lat.					
62. Fockii, Humm.	*				
63. bistriatum (Meg.), Dufts.	*				
64. curvimanum, W.	*	*			
65. Lucasii, Duval	*				
66. obtusum, Sturm	*	*		*	*
67. dubium, W.	*				
68. Atlanticum, W.	*	*			

	Mad.	P^to Sto.	N. Dez.	Dez. Gr.	S. Dez.
25. *Bembidium*, Lat. (continued).					
69. tabellatum, W.	*	....	....	....	....
70. elongatum, Dej.	*	....	....	....	....
71. Schmidtii, W.	*	*	....	....	....
Sectio II. HYDRADEPHAGA.					
Fam. 2. **Dytiscidæ.**					
26. *Colymbetes*, Clairv.					
72. *Lanio*, F.	*	....	....	....	....
27. *Agabus*, Leach					
*73. bipustulatus, L.	*	....	....	....	....
*74. nebulosus, Forst.	*	....	*	*	....
75. *Maderensis*, W.	*	....	....	....	....
28. *Hydroporus*, Clairv.					
76. *vigilans*, W.	*	....	....	....	....
77. Lyellii, W.	....	*	....	....	....
*78. confluens, F.	*	*	*	*	....
Fam. 3. **Gyrinidæ.**					
29. *Gyrinus*, L.					
**79. natator, L.	*	....	....	....	....
Sectio III. PHILHYDRIDA.					
Fam. 4. **Parnidæ.**					
30. *Parnus*, F.					
80. prolifericornis, F.	*	....	....	....	....
Fam. 5. **Hydrophilidæ.**					
31. *Ochthebius*, Leach					
81. 4-*foveolatus* (Mots.), W.	*	*	....	....	....
82. *subpictus*, W.	....	*	....	....	....
83. *rugulosus*, W.	....	*	....	....	....
32. *Calobius*, W.					
84. *Heeri*, W.	*	*	....	....	....
33. *Limnebius*, Leach					
85. grandicollis, W.	*	....	....	....	....
34. *Laccobius*, Er.					
86. minutus, L.	*	*	....	....	....
35. *Hydrobius*, Leach					
87. *Marchantiæ*, W.	*	....	....	....	....
88. *conglobatus*, W.	*	....	....	....	....
36. *Philhydrus*, Sol.					
89. melanocephalus, Ol.	....	*	....	....	....
Fam. 6. **Sphæridiadæ.**					
37. *Dactylosternum*, W.					
90. Roussetii, W.	*	....	....	....	....
38. *Sphæridium*, F.					
*91. bipustulatum, F.	*	*	....	....	....

	Mad.	P^to Sto.	N. Dez.	Dez. Gr.	S. Dez.
39. *Cercyon*, Leach					
*92. littorale, Gyll.	*	....	....	....	....
93. inquinatum, W.	*	....	....	....	....
94. fimetarium, W.	*	*	....	....	....
*95. centrimaculatum, St.	*	*	....	....	....
*96. quisquilium, L.	*	*	....	....	....
Sectio IV. NECROPHAGA.					
Fam. 7. **Silphidæ.**					
40. *Catops*, Payk.					
97. velox, Spence	*	....	....	....	....
Fam. 8. **Ptiliadæ.**					
41. *Acratrichis*, Mots.					
98. *umbricola*, W.	*	....	....	....	....
99. fascicularis, Hbst	*	....	....	....	....
100. pumila, Er.	*	....	....	....	....
101. obscœna, Hal.	*	....	....	....	....
42. *Ptenidium*, Er.					
102. apicale (St.), Gillm.	*	....	....	*	....
Fam. 9. **Phalacridæ.**					
43. *Olibrus*, Er.					
103. *Cinerariæ*, W.	*	....	....	....	....
104. bicolor, F.	*	....	....	....	....
105. liquidus, Er.	*	....	....	....	....
*106. consimilis, Mshm	*	....	....	....	....
Fam. 10. **Nitidulidæ.**					
44. *Carpophilus* (Leach), Steph.					
**107. mutilatus (Hoffm.), Er.	*	....	....	....	....
**108. auropilosus, W.	*	....	....	....	....
**109. hemipterus, L.	*	....	....	....	....
45. *Nitidula*, F.					
*110. flexuosa, Ol.	....	*	....	....	....
*111. 4-pustulata, F.	*	....	....	....	....
*112. discoidea, F.	*	....	....	....	....
*113. colon, L.	*	....	....	....	....
*114. obsoleta, F.	*	....	....	....	....
46. *Pria* (Kby), Steph.					
115. Dulcamaræ, Scop.	*	....	....	....	....
47. *Meligethes* (Kby), Steph.					
116. *Echii*, W.	*	....	....	....	....
117. tristis (Schüpp.), St.	*	*	....	*	....
118. picipes, St.	*	....	....	....	....
119. *varicollis*, W.	*	....	....	....	....
48. *Xenostrongylus*, W.					
120. histrio, W.	*	*	....	*	....
49. *Rhyzophagus*, Hbst					
*121. bipustulatus, F.	*	....	....	....	....

	Mad.	Pto Sto.	N. Dez.	Dez. Gr.	S. Dez.
Fam. 11. Colydiadæ.					
50. *Tarphius* (Germ.), Er.					
122. *parallelus*, W.	*				
123. *Lowei*, W.	*	*			
124. *inornatus*, W.	*				
125. *sylvicola*, W.	*				
126. *rotundatus*, W.	*				
127. *Lauri*, W.	*				
128. *formosus*, W.	*				
129. *compactus*, W.	*				
130. *nodosus*, W.	*				
131. *cicatricosus*, W.	*				
132. *testudinalis*, W.	*				
133. *sculptipennis*, W.	*				
134. *truncatus*, W.	*				
135. *echinatus*, W.	*				
136. *excisus*, W.		*			
137. *brevicollis*, W.	*				
138. *rugosus*, W.	*				
139. *explicatus*, W.	*				
51. *Cossyphodes*, Westw.					
140. *Wollastonii*, Westw.	*				
52. *Plœosoma*, W.					
141. *ellipticum*, W.	*				
53. *Europs*, W.					
142. *impressicollis*, W.				*	
54. *Lyctus*, F.					
143. brunneus, Steph.	*				
Fam. 12. Trogositidæ.					
55. *Trogosita*, Ol.					
**144. mauritanica, L.	*				
**145. serrata, W.	*				
Fam. 13. Cucujidæ.					
56. *Biphyllus* (Dej.), Steph.					
146. lunatus, F.	*				
57. *Cryptamorpha*, W.					
147. Musæ, W.	*				
58. *Læmophlœus* (Dej.), Er.					
148. *Donacioides*, W.	*				
149. *granulatus*, W.	*				
150. *vermiculatus*, W.	*				
**151. pusillus, Schön.	*				
**152. ferrugineus (Creutz.), Steph.	*				
153. *claricollis*, W.	*				
154. *axillaris*, W.	*				
155. *Stenoides*, W.	*				
59. *Silvanus*, Lat.					
*156. unidentatus, Ol.	*				
**157. Surinamensis, L.	*				
**158. dentatus, Mshm	*				
*159. advena (Kunze), Waltl	*				

	Mad.	P^to S^to.	N. Dez.	Dez. Gr.	S. Dez.
Fam. 14. Cryptophagidæ.					
60. *Cryptophagus*, Hbst					
**160. saginatus (Schüpp.), St.	*	.	.	.	.
**161. cellaris, Scop.	*	.	.	.	.
*162. dentatus, Hbst	*	.	.	.	.
**163. affinis, St.	*	.	.	.	.
164. *Nitiduloides*, W.	*	.	.	.	.
61. *Paramecosoma*, Curt.					
165. simplex, W.	*	.	.	.	.
62. *Hypocoprus*, Mots.					
166. *Motschulskii*, W.	.	*	.	.	.
63. *Atomaria* (Kby), Steph.					
*167. munda, Er.	*	.	.	.	.
*168. apicalis, Er.	*	.	.	.	.
169. *insecta*, W.	*	.	.	.	.
170. *alternans*, W.	*	.	.	.	.
64. *Ephistemus* (Westw.), Steph.					
171. gyrinoides, Mshm	*	.	.	.	.
Fam. 15. Lathridiadæ.					
65. *Cholovocera*, Mots.					
172. Maderæ (Westw.), W.	*	.	.	.	.
66. *Holoparamecus*, Curt.					
173. niger (Chevr.), Aubé	*	*	.	.	.
67. *Corticaria*, Mshm					
174. rotulicollis, W.	*	.	.	.	.
*175. crenicollis, Mann.	*	.	.	.	.
**176. fulva (Chevr.), Mann.	*	.	.	.	.
177. *rotundicollis*, W.	*	.	.	.	.
178. *curta*, W.	*	*	.	*	*
179. Fagi, W.	*	.	.	.	.
68. *Lathridius*, Hbst					
*180. assimilis, Mann.	*	.	.	.	.
*181. minutus, L.	*	.	.	.	.
*182. transversus, Ol.	*	.	.	.	.
*183. ruficollis, Mshm	*	.	.	.	.
69. *Metophthalmus*, W.					
184. *asperatus*, W.	*	.	.	.	.
70. *Monotoma*, Hbst					
185. spinifera, W.	*	.	.	.	.
186. congener, W.	*	.	.	.	.
Fam. 16. Mycetophagidæ.					
71. *Berginus* (Dej.), Er.					
187. Tamarisci (Dej.), W.	*	*	.	.	.
72. *Mycetæa* (Kby), Steph.					
*188. hirta, Gyll.	*	.	.	.	.
73. *Microchondrus* (Guér.), W.					
189. domuum (Guér.), W.	*	.	.	.	.
74. *Typhæa* (Kby), Steph.					
*190. fumata, L.	*	.	.	.	.
75. *Litargus*, Er.					
191. *pictus*, W.	*	.	.	.	.
192. *pilosus*, W.	*	.	.	.	.

	Mad.	Pto Sto.	N. Dez.	Dez. Gr.	S. Dez.
Fam. 17. **Dermestidæ.**					
76. *Dermestes*, L.					
**193. vulpinus, F.	*				
77. *Attagenus*, Lat.					
**194. megatoma, F.	*				
78. *Anthrenus*, Geoffr.					
*195. varius, F.	*	*			
Sectio V. CORDYLOCERATA.					
Fam. 18. **Byrrhidæ.**					
79. *Syncalypta* (Dillw.), Steph.					
196. *capitata*, W.	*				
197. *ovuliformis*, W.	*				
198. *horrida*, W.		*		*	
Fam. 19. **Histeridæ.**					
80. *Hister*, L.					
*199. major, L.		*			
81. *Paromalus*, Er.					
200. minimus (Dej.), Aubé	*				
*201. pumilio, Er.	*				
82. *Saprinus*, Er.					
**202. nitidulus, F.	*				
*203. chalcites, Illig.	*	*		*	
*204. metallicus, Hbst		*			
83. *Acritus*, Le Conte.					
205. minutus, Hbst.	*	*			
206. *homœopathicus*, W.	*				
Fam. 20. **Thorictidæ.**					
84. *Thorictus*, Germ.					
207. *Westwoodii*, W.	*	*			
Fam. 21. **Aphodiadæ.**					
85. *Aphodius*, Illig.					
*208. Hydrochæris, F.	*	*			
*209. nitidulus, F.	*	*			
*210. rufus, Illig.	*				
*211. lividus, Ol.	*	*			
212. Pedrosi, W.		*			
*213. granarius, L.	*	*			
86. *Oxyomus* (Esch.), De Casteln.					
214. Heinekeni, W.	*				
215. brevicollis, W.	*				
87. *Psammodius*, Gyll.					
216. cæsus, Puz.	*	*			
217. sabulosus (Dej.), Muls.	*	*			
218. porcicollis, Illig.		*			
Fam. 22. **Trogidæ.**					
88. *Trox*, F.					
**219. scaber, L.	*				

	Mad.	Pto Sto.	N. Dez.	Dez. Gr.	S. Dez.
Fam. 23. **Glaphyridæ.**					
89. *Chasmatopterus* (Dej.), Lat.					
*220. nigrocinctus, W.	*	.	.	.	.
Sectio VI. PRIOCERATA.					
Fam. 24. **Buprestidæ.**					
90. *Agrilus* (Meg.), Steph.					
221. Darwinii, W.	*	.	.	.	.
Fam. 25. **Throscidæ.**					
91. *Trixagus*, Kugel.					
222. *integer*, W.	*	.	.	.	.
223. gracilis, W.	*	.	.	.	.
Fam. 26. **Elateridæ.**					
92. *Coptostethus*, W.					
224. *femoratus*, W.	.	*	.	.	.
Fam. 27. **Cyphonidæ.**					
93. *Eucinetus*, Schüpp.					
225. ovum, W.	*	.	.	.	.
Fam. 28. **Telephoridæ.**					
94. *Malthodes*, Kiesw.					
226. Kiesenwetteri, W.	*	*	.	.	.
Fam. 29. **Melyridæ.**					
95. *Malachius*, F.					
227. militaris, W.	*	.	.	.	.
96. *Pecteropus*, W.					
228. *Maderensis*, W.	*	*	.	.	*
229. *rugosus*, W.	*	.	.	.	.
230. *rostratus*, W.	.	*	.	*	*
97. *Dasytes*, Payk.					
231. illustris, W.	*	*	.	*	.
98. *Melyrosoma*, W.					
232. *oceanicum*, W.	*	.	.	.	.
233. *abdominale*, W.	*	.	.	.	.
234. *Artemisiæ*, W.	.	.	*	*	.
Fam. 30. **Cleridæ.**					
99. *Opilus*, Lat.					
*235. mollis, L.	*	.	.	.	.
100. *Necrobia*, Ol.					
**236. ruficollis, Thunb.	*	.	.	.	.
Fam. 31. **Ptinidæ.**					
101. *Ptinus*, L.					
**237. testaceus, Ol.	*	.	.	.	.
**238. brunneus (Meg.), Dufts.	*	.	.	.	.
239. Mauritanicus, Lucas	*	.	.	.	.
240. *Dawsoni*, W.	.	.	.	*	*

	Mad.	Pto Sto.	N. Dez.	Dez. Gr.	S. Dez.
101. *Ptinus*, L. (continued).					
241. *nodulus*, W.		*			
242. *pinguis*, W.					
243. *orbatus*, W.					
244. *pilula*, W.					
245. *albopictus*, W.	*	*	*	*	*
246. *nigrescens*, W.	*				
247. *fragilis*, W.		*		*	*
102. *Mezium* (Leach), Curt.					
**248. sulcatum, F.	*				
103. *Gibbium*, Scop.					
**249. scotias, F.	*				
104. *Anobium*, F.					
250. velatum, W.	*				*
**251. striatum, Ol.	*			*	
**252. paniceum, L.	*				
**253. molle, L.	*				
254. Ptilinoides, W.	*				
Fam. 32. **Cissidæ.**					
105. *Cis*, Lat.					
255. *Wollastonii*, Mellié	*				
256. fuscipes (Chev.), Mellié	*				
257. *Lauri*, W.	*				
106. *Octotemnus*, Mellié					
258. *opacus*, Mellié	*				
107. *Ptilinus*, Geoffr.					
259. cylindripennis, W.	*				
108. *Rhyzopertha*, Steph.					
**260. pusilla, F.	*				
Sectio VII. RHYNCOPHORA.					
Fam. 33. **Tomicidæ.**					
109. *Tomicus*, Lat.					
*261. erosus, W.	*				
*262. villosus, F.	*				
263. *Dohrnii*, W.	*				
264. perforans, W.	*				
110. *Aphanarthrum*, W.					
265. *Euphorbiæ*, W.	*				
111. *Leiparthrum*, W.					
266. *mandibulare*, W.	*				
267. *bituberculatum*, W.	*				
268. *curtum*, W.	*				
269. *Artemisiæ*, W.			*		
112. *Hypoborus*, Er.					
*270. Ficus, Er.	*	*			
Fam. 34. **Hylesinidæ.**					
113. *Phlœophthorus*, W.					
271. *perfoliatus*, W.	*				

	Mad.	Pto Sto.	N. Dez.	Dez. Gr.	S. Dez.
114. *Hylurgus*, Lat.					
**272. ligniperda, F.	*			*	
**273. piniperda, L.	*				
115. *Hylastes*, Er.					
274. Trifolii, Müll.	*				
275. clavus, W.	*				
Fam. 35. **Curculionidæ.**					
116. *Rhyncolus* (Creutz.), Germ.					
276. *tenax*, W.	*				
117. *Phlœophagus*, Schön.					
*277. sulcipennis, W.	*				
118. *Leipommata*, W.					
278. *calcaratum*, W.		*			
119. *Caulotrupis*, W.					
279. *lacertosus*, W.	*			*	
280. *lucifugus*, W.	*	*	*	*	*
281. *impius*, W.	*			*	*
282. *terebrans*, W.		*			
283. *Chevrolatii*, W.	*				
284. *opacus*, W.	*				
285. *conicollis*, W.	*			*	
120. *Caulophilus*, W.					
286. *sculpturatus*, W.	*				
121. *Stenotis*, W.					
287. *acicula*, W.	*				
122. *Mesites*, Schön.					
288. *Euphorbiæ*, W.	*				
289. *Maderensis*, W.	*				
123. *Sitophilus*, Schön.					
**290. granarius, L.	*				
**291. Oryzæ, L.	*				
124. *Cionus*, Clairv.					
292. pulchellus, Hbst	*				
125. *Ceutorhynchus* (Schupp.), Schön.					
293. Echii, F.	*	*		*	
*294. quadridens, Pnz.	*			*	
295. nigroterminatus, W.	*				
296. *lineatotessellatus*, W.	*				
126. *Cœliodes*, Schön.					
**297. fuliginosus, Mshm.	*				
127. *Acalles*, Schön.					
298. *saxicola*, W.				*	
299. *histrionicus*, W.		*			
300. *pulverulentus*, W.	*				
301. *oblitus*, W.	*				
302. *nodiferus*, W.	*				
303. *coarctatus*, W.	*				
304. *Vau*, W.	*				
305. *festivus*, W.	*				
306. *terminalis*, W.	*				
307. *ornatus*, W.	*				
308. *dispar*, W.	*				

	Mad.	Pto Sto.	N. Dez.	Dez. Gr.	S. Dez.
127. *Acalles*, Schön. (continued).					
309. *albolineatus*, W.	*				
310. *globulipennis*, W.	*				
311. *lunulatus*, W.	*				
312. *cylindricollis*, W.	*				
313. *Wollastoni*, Chev.	*				
128. *Tychius* (Germ.), Schön.					
314. *robustus*, W.	*	*	*	*	*
315. *albosquamosus*, W.				*	
316. *filirostris*, W.		*			
129. *Pissodes*, Germ.					
**317. notatus, F.	*			*	
130. *Lixus*, F.					
318. Cheiranthi, W.	*				
319. Chawneri, W.	*	*			
320. *vectiformis*, W.		*			
321. angustatus, F.	*				
322. rufitarsis, Schön.	*				
131. *Cyphoscelis*, W.					
323. *distorta*, W.	*				
132. *Laparocerus*, Schön.					
324. *morio*, Schön.	*	*	*	*	*
133. *Atlantis*, W.					
325. *clavatus*, W.	*				
326. *lamellipes*, W.	*				
327. *calcatrix*, W.	*				
328. *noctivagans*, W.	*				
329. *vespertinus*, W.	*				
330. *lanatus*, W.	*				
331. *navicularis*, W.		*			
332. *inconstans*, W.		*			
333. *mendax*, W.		*			
334. *instabilis*, W.		*	*	*	
335. *excelsus*, W.	*				
336. *Schaumii*, W.	*	*			
134. *Omias* (Germ.), Schön.					
337. *ventrosus*, W.	*				
338. *œnescens*, W.	*				
339. *angustulus*, W.	*				
340. *Waterhousei*, W.	*			*	
135. *Anemophilus*, W.					
341. *crassus*, W.		*			
342. *subtessellatus*, W.		*			
343. *trossulus*, W.		*			
136. *Lichenophagus*, W.					
344. *fritillus*, W.		*			
345. *acuminatus*, W.				*	
137. *Scoliocerus*, W.					
346. *Maderæ*, W.	*				
347. *curvipes*, W.	*				
138. *Trachyphlœus*, Germ.					
348. scaber, L.	*				

	Mad.	Pto Sto.	N. Dez.	Dez. Gr.	S. Dez.
139. *Echinosoma*, W.					
349. *porcellus*, W.	*				
140. *Hypera*, Germ.					
350. *lunata*, W.	*	*		*	
*351. murina, F.	*	*		*	
*352. variabilis, Hbst	*	*		*	*
141. *Cleonus*, Schön.					
353. plicatus, Ol.	*	*		*	
142. *Sitona*, Germ.					
354. gressoria, F.	*				
355. latipennis, Schön.	*				
356. cambrica (Kby), Steph.	*	*			
*357. lineata, L.	*	*			
*358. humeralis (Kby), Steph.	*	*			
Fam. 36. **Attelabidæ.**					
143. *Apion*, Hbst					
359. vernale, F.	*				
360. delicatulum, W.	*				
361. *sagittiferum*, W.	*	*		*	
362. Malvæ, F.	*				
363. frumentarium, L.	*	*			
364. chalybeipenne (Schön.), W.	*	*		*	
365. *Wollastoni*, Chev.	*				
366. rotundipenne, W.	*	*		*	
144. *Auletes*, Schön.					
367. *Maderensis*, W.	*				
Fam. 37. **Bruchidæ.**					
145. *Xenorchestes*, W.					
368. *saltitans*, W.	*				
146. *Bruchus*, Geoffr.					
**369. rufimanus, Schön.	*				
*370. subellipticus, W.	*				
371. *lichenicola*, W.		*	*	*	
Sectio VIII. EUCERATA.					
Fam. 38. **Cerambicidæ.**					
147. *Stromatium*, Serv.					
**372. unicolor, Ol.	*				
148. *Criocephalus*, Muls.					
**373. rusticus, L.	*				
149. *Hylotrupes*, Serv.					
**374. Bajulus, L.	*				
150. *Phymatodes*, Muls.					
*375. variabilis, L.	*				
151. *Blabinotus*, W.					
376. *spinicollis*, W.	*				
377. *Bewickii*, W.	*				
152. *Hesperophanes*, Muls.					
378. *senex*, W.	*				

	Mad.	Pto Sto.	N. Dez.	Dez. Gr.	S. Dez.
153. *Clytus*, F.					
**379. Arietis, L.	*				
154. *Deucalion*, W.					
380. *Desertarum*, W.				*	*
155. *Pogonocherus* (Meg.), Steph.					
**381. hispidus, L.	*				
Sectio IX. PHYTOPHAGA.					
Fam. 39. Crioceridæ.					
156. *Lema*, F.					
382. melanopa, L.	*	*		*	
157. *Crioceris*, Geoffr.					
*383. Asparagi, L.	*				
Fam. 40. Cassididæ.					
158. *Cassida*, L.					
*384. nebulosa, L.	*				
385. hemisphærica, Hbst	*				
386. Rossii, W.	*				
Fam. 41. Galerucidæ.					
159. *Haltica*, Geoffr.					
*387. subtilis, W.	*	*		*	
388. Salicariæ, Payk.	*	*			
160. *Longitarsus*, Lat.					
389. *Masoni*, W.	*				
390. *Cinerariæ*, W.	*				
391. *consanguineus*, W.	*				
392. saltator, W.	*				
393. lutescens, Gyll.	*	*	*		
394. nervosus, W.	*	*		*	
395. nubigena, W.	*				
396. *fractus*, W.	*				
397. *excurvus*, W.		*			
161. *Psylliodes*, Lat.					
*398. chrysocephala, L.	*				
*399. hospes, W.	*	*		*	
400. umbratilis, W.	*				
401. *vehemens*, W.	*	*		*	
402. *tarsata*, W.	*				
Fam. 42. Chrysomelidæ.					
162. *Mniophilosoma*, W.					
403. *læve*, W.	*				
163. *Cryptocephalus*, Geoffr.					
404. *crenatus*, W.	*				
164. *Chrysomela*, L.					
405. *Fragariæ*, W.	*				
165. *Gastrophysa* (Chev.), Redt.					
**406. Polygoni, L.	*				

Sectio X. PSEUDOTRIMERA.	Mad.	Pto Sto.	N. Dez.	Dez. Gr.	S. Dez.
Fam. 43. **Coccinellidæ.**					
166. *Coccinella*, L.					
407. mutabilis, Scriba	*	*			
408. 7-punctata, L.	*	*		*	
*409. 14-pustulata, L.	*				
410. testudinea (Hein.), W.	*				
411. *Genistæ*, W.	*				
167. *Scymnus*, Kugel.					
412. Durantæ, W.	*				
413. marginalis, Rossi	*				
414. *decemplagiatus*, W.	*				
415. arcuatus, Rossi	*				
416. *flavopictus*, W.	*		*		
417. minimus, Rossi	*				
418. *Limnichoides*, W.	*	*			
168. *Rhyzobius*, Steph.					
419. litura, F.	*	*		*	
420. *oculatissimus*, W.	*				
Fam. 44. **Corylophidæ.**					
169. *Clypeaster* (Andersch.), Redt.					
421. pusillus, Gyll.	*			*	
170. *Arthrolips*, W.					
422. æquale, W.	*				
423. piceum (Kunze), Com.	*			*	
171. *Sericoderus*, Steph.					
424. lateralis (Meg.), Gyll.	*			*	
172. *Corylophus* (Leach), Steph.					
425. *tectiformis*, W.	*				
173. *Glœosoma*, W.					
426. *velox*, W.	*				
174. *Orthoperus*, Steph.					
*427. atomus, Gyll.	*				
*428. atomarius, Heer	*				
Fam. 45. **Clambidæ.**					
175. *Calyptomerus*, Redt.					
*429. dubius, Mshm	*				
Sectio XI. ATRACHELIA.					
Fam. 46. **Anisotomidæ.**					
176. *Stagonomorpha*, W.					
430. *sphærula*, W.	*				
177. *Stereus*, W.					
431. *Cercyonides*, W.	*				
Fam. 47. **Diaperidæ.**					
178. *Ellipsodes*, W.					
432. *glabratus*, F.	*				
433. *oblongior*, W.		*		*	*
179. *Phaleria*, Lat.					
434. ciliata, W.		*			

	Mad.	Pto Sto.	N. Dez.	Dez. Gr.	S. Dez.
Fam. 48. Tenebrionidæ.					
180. *Cerandria* (Dej.), Lucas					
**435. cornuta, F.	*	....	....	*	....
181. *Tribolium*, MacLeay					
**436. ferrugineum, F.	*	....	....	....	....
182. *Hypophlœus*, F.					
437. ambiguus, W.	*	....	....	....	....
183. *Boromorphus* (Mots.), W.					
438. *Maderæ*, W.	*	*	....	....	....
184. *Calcar* (Dej.), Lat.					
439. elongatus, Hbst	*	*	....	....	....
185. *Tenebrio*, L.					
**440. molitor, L.	*	....	....	....	....
**441. obscurus, F.	*	....	....	....	....
186. *Alphitobius*, Steph.					
**442. diaperinus, Kugel.	*	....	....	....	....
Fam. 49. Opatridæ.					
187. *Autocera*, W.					
443. *laticeps*, W.	*	....	....	....	....
188. *Opatrum*, F.					
444. fuscum, Hbst	*	*	....	*	....
445. *errans*, W.	*	....	....	....	....
189. *Hadrus* (Dej.), W.					
446. *alpinus*, W.	*	....	....	....	....
447. *cinerascens* (Dej.), W.	*	....	*	*	*
448. *illotus*, W.	....	*	....	....	....
Fam. 50. Blapsidæ.					
190. *Macrostethus*, W.					
449. *tuberculatus*, W.	....	....	*	....	....
191. *Blaps*, F.					
*450. gages, L.	*	*	....	....	....
*451. fatadica (Creutz.), St.	*	*	....	....	....
Fam. 51. Tentyriadæ.					
192. *Hegeter*, Lat.					
452. elongatus, Ol.	*	*	....	....	....
Fam. 52. Helopidæ.					
193. *Helops*, F.					
453. *Vulcanus*, W.	*	....	*	*	*
454. *confertus*, W.	*	....	....	....	....
455. *Pluto*, W.	*	....	....	....	....
456. *infernus*, W.	....	*	....	....	....
457. *subdepressus*, W.	*	....	....	....	....
458. *lucifugus*, W.	....	*	....	....	....
459. *congregatus*, W.	*	....	....	*	*
460. *futilis*, W.	*	....	....	*	*
461. *Portosanctanus*, W.	....	*	....	....	....
462. *cinnamomeus*, W.	*	....	....	....	....
463. pallidus, Curt.	....	*	....	....	....

Sectio XII. TRACHELIA.	Mad.	Pto Sto.	N. Dez.	Dez. Gr.	S. Dez.
Fam. 53. **Œdemeridæ.**					
194. *Stenaxis*, Schmidt					
464. *Lowei*, W.	*	....	....	....	....
Fam. 54. **Salpingidæ.**					
195. *Salpingus*, Illig.					
465. *impressus*, W.	*	....	....	....	....
Fam. 55. **Meloidæ.**					
196. *Meloë*, L.					
466. *austrinus*, W.	*	....	....	....	....
467. rugosus, Mshm	*	*	....	....	....
468. *flavicornis*, W.	*	*	....	*	....
197. *Zonitis*, F.					
469. 4-punctata, F.	*	*	....	....	....
Fam. 56. **Mordellidæ.**					
198. *Anaspis*, Geoffr.					
470. Proteus, W.	*	*	*	*	*
Fam. 57. **Anthicidæ.**					
199. *Formicomus*, Laferté					
471. pedestris, Rossi	*	....	....	....	....
200. *Anthicus*, Payk.					
*472. floralis, L.	*	....	....	....	....
473. instabilis (Hoffin.), Schmidt	*	*	....	....	....
474. litoralis, Heer	*	....	....	....	....
475. crinitus, Laferté	*	....	....	....	....
476. hispidus, Rossi	*	*	....	....	....
477. *Lubbockii*, W.	*	....	....	....	....
201. *Xylophilus* (Bon.), Lat.					
478. pallescens, W.	*	....	....	....	....
Sectio XIII. BRACHELYTRA.					
Fam. 58. **Scydmænidæ.**					
202. *Scydmænus*, Lat.					
479. Helferi, Schaum	*	....	....	....	....
Fam. 59. **Pselaphidæ.**					
203. *Euplectus* (Kby), Leach					
480. *intermedius*, W.	*	....	....	....	....
Fam. 60. **Staphylinidæ.**					
204. *Falagria* (Leach), Mann.					
481. obscura, Grav.	*	*	....	....	....
205. *Phytosus* (Rudd), Curt.					
482. nigriventris, Chev.	....	*	....	....	....
206. *Tachyusa*, Er.					
483. *raptoria*, W.	*	....	....	....	....
207. *Chilopora*, Kraatz					
484. longitarsis (Kby), Steph.	*	....	....	....	....

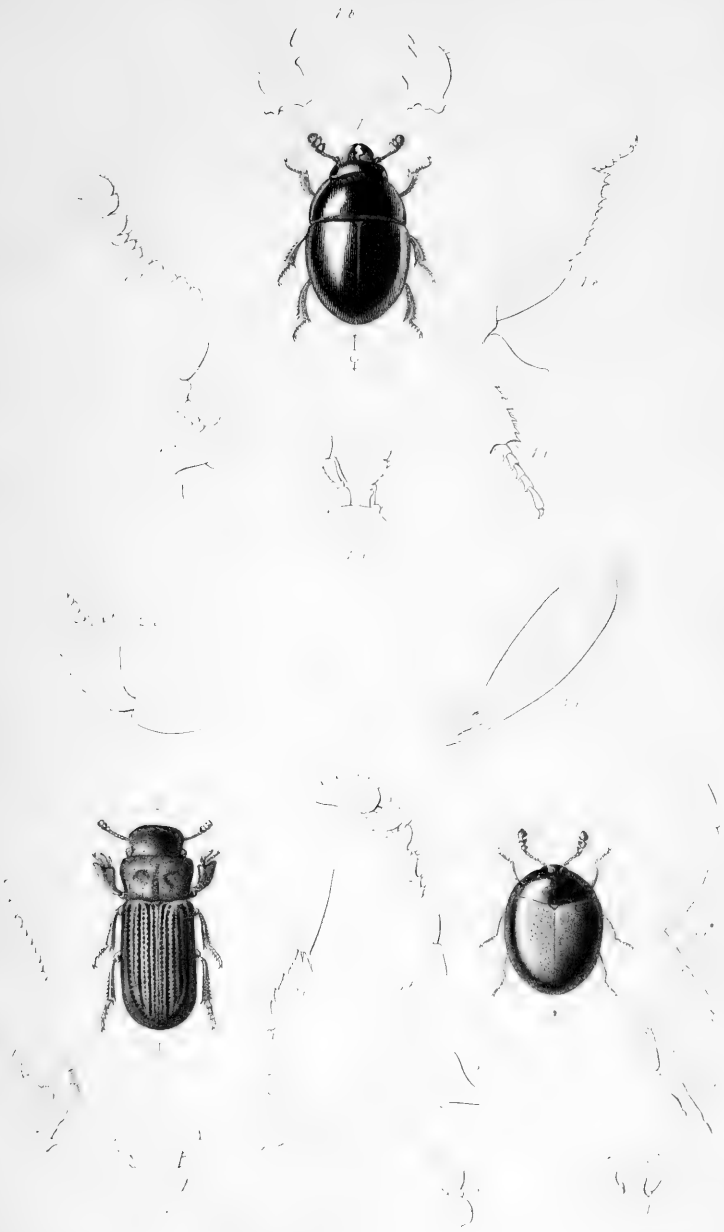
	Mad.	Pto Sto.	N. Dez.	Dez. Gr.	S. Dez.
208. *Xenomma*, W.					
485. *planifrons*, W.	*				
486. *formicarum*, W.	*				
487. *filiforme*, W.	*	*			
209. *Homalota*, Mann.					
488. *truncorum*, W.	*				
489. *sanguinolenta*, W.	*				
490. *haligena*, W.		*	*		*
491. *granulosa*, W.	*				
492. obliquepunctata, W.	*				
493. luridipennis, Mann.	*				
494. gregaria, Er.		*			
495. *Philonthoides*, W.	*				
496. palustris, Kiesw.	*				
497. Thinobioides, Kraatz	*				
498. analis, Grav.	*				
499. plebeia, W.	*				
500. montivagans, W.	*				
501. coriaria (Mill.), Kraatz	*				
502. umbratilis, W.	*				
503. alutaria, W.	*				
504. *insignis*, W.	*				
505. atramentaria (Kby), Gyll.	*	*			
*506. longicornis, Grav.	*				
*507. lividipennis, Mann.	*	*			
210. *Oxypoda*, Mann.					
508. *lurida*, W.	*				
509. rugifrons, W.	*				
211. *Aleochara*, Grav.					
*510. puberula, Klug	*	*			
511. tristis, Grav.	*	*			
512. mœsta, Grav.	*				
513. nitida, Grav.	*	*		*	
514. binotata, Kraatz		*			
515. morion, Grav.	*				
212. *Oligota*, Mann.					
516. pusillima, Grav.	*				
517. inflata, Mann.	*	*			
213. *Somatium*, W.					
518. *anale*, W.	*				
214. *Conurus*, Steph.					
519. pubescens, Payk.	*				
520. pedicularius, Grav.	*	*			
521. *monticola*, W.	*				
215. *Tachyporus*, Grav.					
522. *celer*, W.	*				
523. brunneus, F.	*	*		*	*
216. *Habrocerus*, Er.					
524. capillaricornis, Grav.	*				
217. *Tachinus*, Grav.					
*525. Silphoides, L.	*				
218. *Trichophya*, Mann.					
526. *Huttoni*, W.	*				

	Mad.	P^to S^to.	N. Dez.	Dez. Gr.	S. Dez.
219. *Mycetoporus*, Mann.					
527. pronus, Er.	*				
220. *Othius* (Leach), Steph.					
528. *strigulosus*, W.	*				
529. *vestitus*, W.	*				
530. *Jansoni*, W.	*				
531. *brevicornis*, W.				*	
221. *Xantholinus*, Dahl					
532. punctulatus, Payk.	*				
533. linearis, Ol.	*				
222. *Staphylinus*, L.					
*534. maxillosus, L.	*	*			
223. *Philonthus* (Leach), Steph.					
*535. æneus, Rossi	*				
536. umbratilis, Grav.	*				
537. sordidus, Grav.	*			*	
*538. bipustulatus, Pnz.	*	*			
*539. scybalarius, Nordm.	*	*			
*540. proximus, W.	*	*			
*541. discoideus, Grav.	*				
542. *simulans*, W.	*				
543. nigritulus, Grav.	*	*			
544. punctipennis, W.	*				
545. filiformis, W.	*				
224. *Achenium* (Leach), Curt.					
546. Hartungii, Heer.	*	*			
225. *Lathrobium*, Grav.					
547. multipunctatum, Grav.	*				
226. *Lithocharis* (Dej.), Lacord.					
548. fuscula (Ziegl.), Lacord.	*				
*549. ochracea, Grav.	*				
550. *indigena*, W.	*				
551. melanocephala, F.	*	*		*	*
552. *debilicornis*, W.	*				
227. *Rugilus* (Leach), Curt.					
553. affinis, Er.	*				
228. *Sunius* (Leach), Steph.					
554. angustatus, Payk.	*	*			*
555. bimaculatus, Er.	*				
229. *Mecognathus*, W.					
556. *Chimæra*, W.	*				
230. *Stenus*, Lat.					
557. guttula, Müll.	*	*			
558. providus, Er.	*				
559. *undulatus*, W.	*				
560. *hydropathicus*, W.	*				
561. *fulvescens*, W.	*				
562. *Heeri*, W.	*				
231. *Platysthetus*, Mann.					
563. spinosus, Er.		*			
564. *fossor*, W.	*				
232. *Oxytelus*, Grav.					
*565. piceus, Linn.	*	*			

	Mad.	P^to S^to.	N. Dez.	Dez. Gr.	S. Dez.
232. *Oxytelus*, Grav. (continued).					
566. sculptus, Grav.	*				
*567. insignitus, Grav.	*				
568. complanatus, Er.	*	*			
569. nitidulus, Grav.	*	*			
570. *glareosus*, W.	*				
233. *Trogophlœus*, Mann.					
*571. bilineatus (Kby), Steph.	*				
572. *transversalis*, W.					*
573. *nigrita*, W.		*			
574. corticinus, Grav.	*				
575. *simplicicollis*, W.		*			
234. *Omalium*, Grav.					
576. *ocellatum*, W.			*		
577. *clavicorne*, W.	*				
578. *granulatum*, W.	*				
235. *Megarthrus* (Kby), Steph.					
579. longicornis, W.	*				
236. *Metopsia*, W.					
580. *ampliata*, W.	*				

EXPLANATION OF THE PLATE.

Fig. 1. Stereus Cercyonides, *Woll.*, ♀.
Fig. 2. Autocera laticeps, *Woll.*
Fig. 3. Orthoperus atomarius, *Heer.*



INDEX.

THE END.

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CATALOGUES

OF

THE ZOOLOGICAL COLLECTION

IN

THE BRITISH MUSEUM.

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